

# FLIGHT

The  
AIRCRAFT  
ENGINEER  
&  
AIRSHIPS

First Aero Weekly in the World

Founder and Editor: STANLEY SPOONER

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport

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## Flight

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## EDITORIAL COMMENT.



### The King's Cup Race

SIXTEEN entries, fourteen starters, and five finishers. Thus, may be summarised this year's race for the challenge cup presented by His Majesty the King, which was flown from Hendon, on July 9 and 10. On the face of it the figures are somewhat disappointing, and if one were to judge the reliability of British aero engines purely on the basis of the percentage of machines which completed the 1,464 miles (some 35 per cent. only) a rather alarming picture might be presented. Fortunately, when one comes to look into the matter a little more closely, there is no need to feel unduly alarmed, nor to jump to the conclusion that British aero engines are not uniformly capable of prolonged running at full throttle under conditions such as obtained in the King's Cup Race.

To begin with the non-starters, we gather that Leslie's Hamilton's engine was not ready in time for the race, and thus one entrant was eliminated. The only other non-starter, Mr. Watt, was not permitted to take part in the race because it was discovered, somewhat late, that his engine was a French Clerget, while the rules of the King's Cup Race stipulate that the aircraft and engines must be entirely built within the British Empire. This, therefore, accounts for the two non-starters in the race.

As regards those competitors who did not finish the course, it may be said in general that the causes of their retirement were of a trifling character, yet the effect was, of course, the same as if they had, one and all, suffered from serious engine trouble. The old saying that a chain is only as strong as its weakest link is nowhere more true than in relation to aero engines and their installation, and 1,464 miles at full throttle—perhaps in some instances at engine speeds rather higher than those advocated by the makers—is a very severe test of any engine, particularly, of course, in the case of engines fitted in the slower machines, which have to run for longer periods

## DIARY OF FORTHCOMING EVENTS

*Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in the following list:—*

1926

- July 8-24 .... Royal Tournament, Olympia.
- July 11-27 .... German Seaplane Competition at Warnemünde.
- July 19-Aug. 7 French Competition for Multi-engined Seaplanes, St. Raphael-Frejus.
- July 31 .... Entries close (at special fee) for Light 'Plane Competition, Lympne.
- Aug. 9-15 .... French Light 'Plane Competition.
- Sept. 10-17 Two-Seater Light Aeroplane Competition, Lympne.
- Sept. 18 .... Grosvenor Challenge Cup, at Lympne.
- Oct. .... Schneider Cup Race at Norfolk, Virginia, U.S.A.
- Oct. 24-28 .... Coppa del Mare, Italy.
- Nov. 11-15 .... Coppa d'Italia, Italy.
- Nov.-Dec. .... Paris Aero Show.

to cover the same distance. In spite of this, however, the small engines did well, particularly the "Cirrus" in the D.H. "Moths," of which three out of five completed the course. It was a disappointment that the only "Cirrus" Mark II did not get an opportunity to show what it can do, a broken oil pipe compelling Captain de Havilland to retire at Hendon, after completing two circuits. This new "Cirrus" is believed to be considerably more powerful than the standard type, while weighing rather less, so that it naturally should increase the performance of a machine a good deal. In fact, in the case of Capt. de Havilland's "Moth," the handicap allowance was reduced from the 4 hours 41 mins. 35 secs. of the "Moths" fitted with the standard "Cirrus," to 3 hours 57 mins. 11 secs. The failure of this machine to complete the course was thus not due to the engine itself. In the case of the other "Moth," which retired—that piloted by Mr. Hope—we gather that the pilot was far from feeling well, and it seems likely that this may have been at any rate contributory to his retirement. By getting first, fourth and fifth place respectively, the "Moths" and their "Cirrus" engines, once more justified their reputation, and it is not surprising that this British low-powered machine has gone into quantity production, and is gradually becoming used in nearly all parts of the Empire.

The only "light 'plane" in the race, the Cranwell monoplane with Bristol "Cherub," was unlucky, much to the sincere regret of everybody. At the moment it is not possible to say definitely what caused the trouble, but it appears that after flying for some time Comper noticed considerable vibration. This gradually got worse, and as there was some risk

of a breakage, he made a rather hurried forced landing, without doing a very great deal of damage to the machine. So far, the cause of the vibration has not, we believe, been traced down.

Captain Barnard, the scratch man, was forced to retire at Oxford, the reason given being that he could not maintain his petrol pressure once the surface of the fuel fell below a certain level, and thus again trouble with the engine itself was not the cause.

Other "de Havillanders" who abandoned the race were Col. the Master of Sempill, and Mr. A. S. Butler. The former had a rocker arm break and fly off, tearing the wing fabric in so doing, while the latter had a broken induction pipe, due to a flaw in the aluminium casting.

Of the other two A.D.C. "Nimbus" engines that failed to complete the course, Courtney's had trouble with a valve guide. At present it has not been possible to ascertain what caused the trouble in Perry's engine, which up to the end of the second circuit on the second day had been running splendidly. No information is available concerning the nature of the trouble experienced by Sir Quentin Brand on the "Plover" with "Jupiter" engine, but it is believed that it was connected with the petrol system.

One thus comes to the conclusion that in practically no case was the engine trouble of a serious nature as such, although in the race it was sufficient to eliminate those suffering from it.

Finally, the 1926, race proved that the new speed estimate curve provides a very satisfactory basis for handicapping, the finish being little short of marvelously close, with only a few seconds between the winner and the second man home.



["FLIGHT" Photograph]

**THE PRICE OF VICTORY:** Capt. H. S. Broad on completing his 1,464 miles is promptly seized by his supporters and "chaired" to the Duke of Sutherland and the King's Cup. Broad, it should be mentioned, is not crying because it is all over, but only rubbing the "dust" out of his eyes.

# THE 5<sup>th</sup> KING'S CUP RACE

A VERY successful and interesting race must, we think, be the verdict on the Fifth King's Cup Air Race, which was flown last Friday and Saturday, starting and finishing at Hendon Aerodrome. Whilst nothing startling in the way of fresh records were created, this year's race was noteworthy on two points—the triumph of the light 'plane, and the successful results obtained with the new R.Ae.C. handicapping scheme.

Before proceeding with an account of the race itself, it may, perhaps, be advisable to give a brief summary of the conditions governing this year's race. It was a handicap race occupying two days and covering a total distance of 1,464 miles. The course, the same for each day, consisted of two triangular laps, each being flown twice alternately, the start and finish being at Hendon. One of these triangles was *via* Martlesham and Cambridge, a distance of 166 miles, and the second *via* Coventry and Cheltenham, a distance of 200 miles.

Competitors did not land at any of these points, but continued on to Hendon, where a compulsory stop of 30 mins. or 1 hour was made before proceeding on the next lap. This year a new handicap scheme was employed, the speed of each machine being based on the following

formula:  $V = F \sqrt[3]{\frac{w}{\lambda}}$  where

$V$  = speed (m.p.h.);  $w$  = total weight of machine as for race (lbs.);  $\lambda$  = power loading in lbs./h.p.; and  $F$  = a coefficient determined from a curve prepared for this purpose (see *FLIGHT*, April 15 last). Judging by the close finish between first and second machines in this year's race—machines, it should be noted, at extreme "ends of the scale"—and by following the lap times of other competitors during the race, it would seem that this system of handicapping is in every way a success.

And now for the race itself.

Firstly, it was won by Capt. H. S. Broad on the D.H. Moth (27-60 "Cirrus I") entered by Sir Chas. Wakefield. Broad completed the full course of 1,464 miles in 16 hrs. 20 mins. 22 secs, at an average speed of 90.4 m.p.h., which, it must be admitted, is certainly a remarkable achievement on the part of pilot, machine and engine. That the "Cirrus" engine was able to withstand over eight hours' flying on each of the two days at full throttle was indeed a remarkable performance. This win is, in fact, a feather in the cap of the already popular "Moth" combination, and, indeed, for the light 'plane. Three out of five

"Moths" entered finishing in a race of this description is "not so bad."

Second place was obtained, with a margin of only 22 seconds, by Flight-Lieut. E. R. C. Scholefield, on the Vickers "Vixen III" (Napier "Lion") entered by Mr. Douglas Vickers. Scholefield, who completed his various laps with comparative consistency, covered the full course in 10 hrs. 25 mins. at an average speed of 142.2 m.p.h.

Broad thus won the King's Cup, on behalf of Sir Charles Wakefield, as well as the £100 presented by Sir Charles to the entrant of the winner, and also £50 presented by Mr.

J. D. Siddeley to the first machine home with an engine of less than 80 h.p. The second prize of £75, offered by the Royal Aero Club, went, of course, to Mr. Douglas Vickers.

The third prize of £50, also given by the Royal Aero Club, was won by Sqdn.-Leader H. W. G. Jones, for Lieut.-Col. M. O. Darby, on the Martinsyde A.D.C.1 (Siddeley "Jaguar"), who completed the course in 9 hrs. 45 mins. 14 secs. at an average speed of 151.9 m.p.h. and, incidentally, won the £100 presented by Sir Charles Wakefield for "fastest" time.

Out of 16 entrants, 14 got away on the first day of the race, the two non-starters being Leslie Hamilton on the Martinsyde F.6, who was unable to get his engine ready in time, and D. A. N. Watt on the "Swallow" monoplane, who was disqualified on account of his engine being of French manufacture. Of the 14, just half this number completed the full four circuits, and out of the seven starters on the second day five finished the remaining four circuits.

As originally planned, the race was timed to start at 8 a.m., and on our arrival at Hendon aerodrome some half-an-hour before this time we saw the five "Moths" lined up in readiness and receiving final adjustments. The weather conditions,

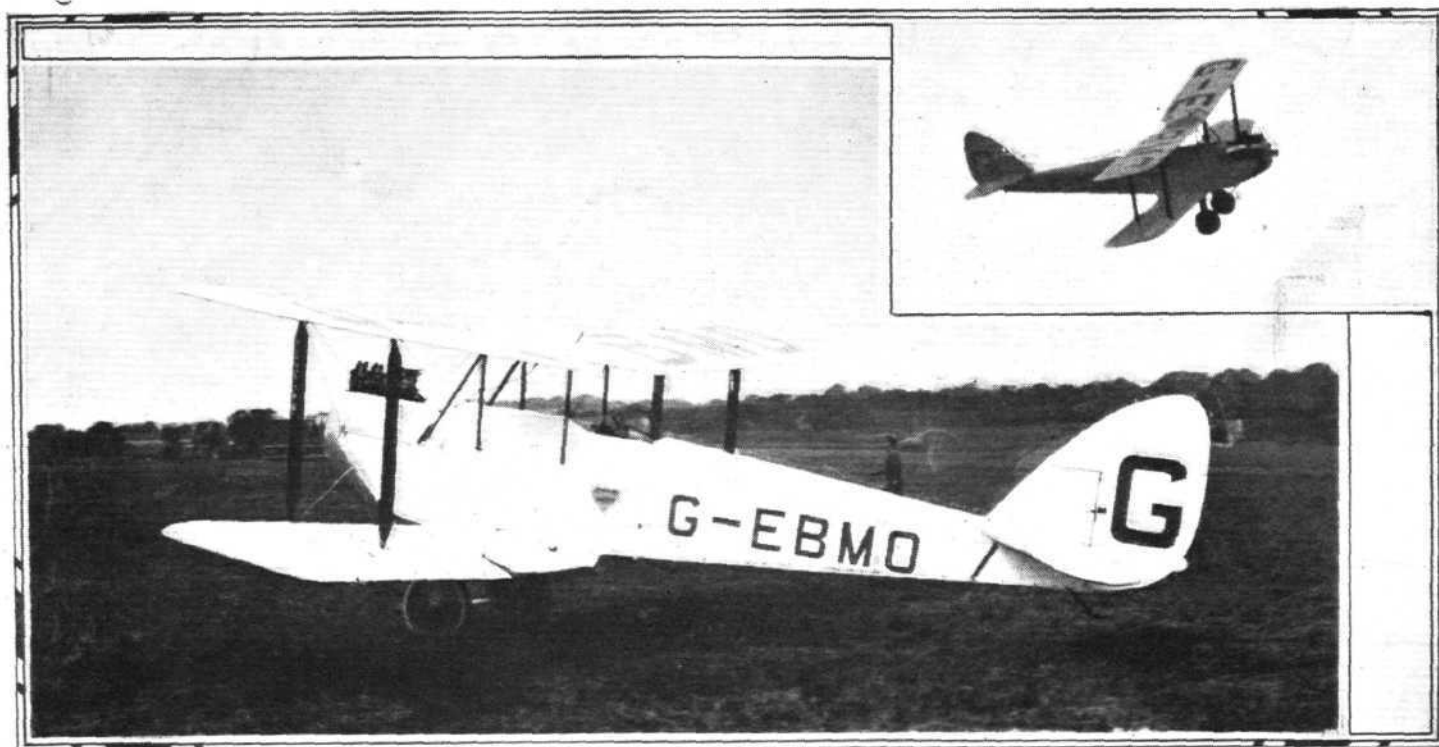
however, were not at all promising just then, the whole of the aerodrome and surrounding country was enveloped in thick mist and fog, and furthermore we understood that conditions were even worse over East Anglia, along the route of the first circuit—Martlesham and Cambridge. By 8 o'clock all was in readiness—the "Moths" having been joined by the Cranwell monoplane, now fitted with a Bristol "Cherub" series III, and a Fairey-Reed metal airscrew—but there were rumours floating around that the start would be postponed for an hour. Sure enough,



[“FLIGHT” Photographs]

**THE REWARD OF VICTORY:** The Duke of Sutherland presenting the King's Cup to Capt. H. S. Broad, who won this year's race on a D.H. "Moth" ("Cirrus"). Sir Sefton Brancker will be seen leading the applause, and behind Captain Broad is Lieut.-Col. Sir F. K. McClean.



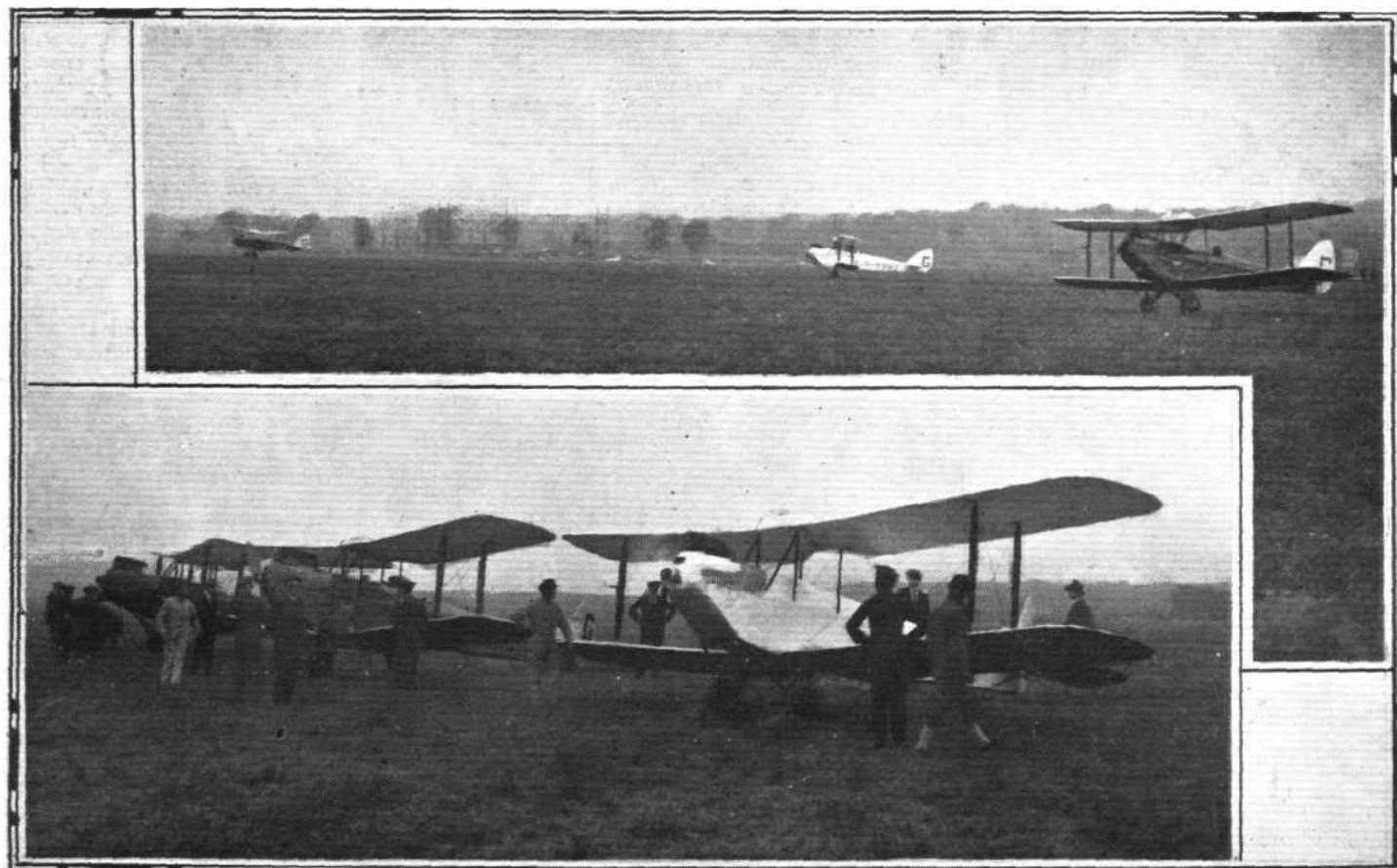


THE WINNER OF THE FIFTH KING'S CUP RACE: Capt. H. S. Broad takes off on the white and red D.H. "Moth" at the start on Friday. Inset, the "Moth" is shown "Crossing the line" at the finish on Saturday.

presently we heard Comdr. Perrin's voice—considerably amplified through the agency of the *Daily Mail* and Marconiphone loud speakers—announce that this was so.

Whilst, therefore, the Royal Aero Club "Record" Dance Band played us some selections during this wait, we took the

opportunity of admiring the smart platoon of D.H. "Moths." All five, by the way, wore distinctive colours—which, incidentally, helped considerably in identifying them during the race, so that we suggest this might be adopted in future races. Broad's G-EBMO looked by far the smartest with its



THE FIFTH KING'S CUP AIR RACE: Three of the five D.H. "Moths" are shown, in the bottom picture, lined up for the start on Friday, and above Hope, Broad and Sparks are seen taking off together on their respective "Moths."

# THE FIFTH KING'S CUP AIR RACE

## RESULTS.

### First Day, July 9.

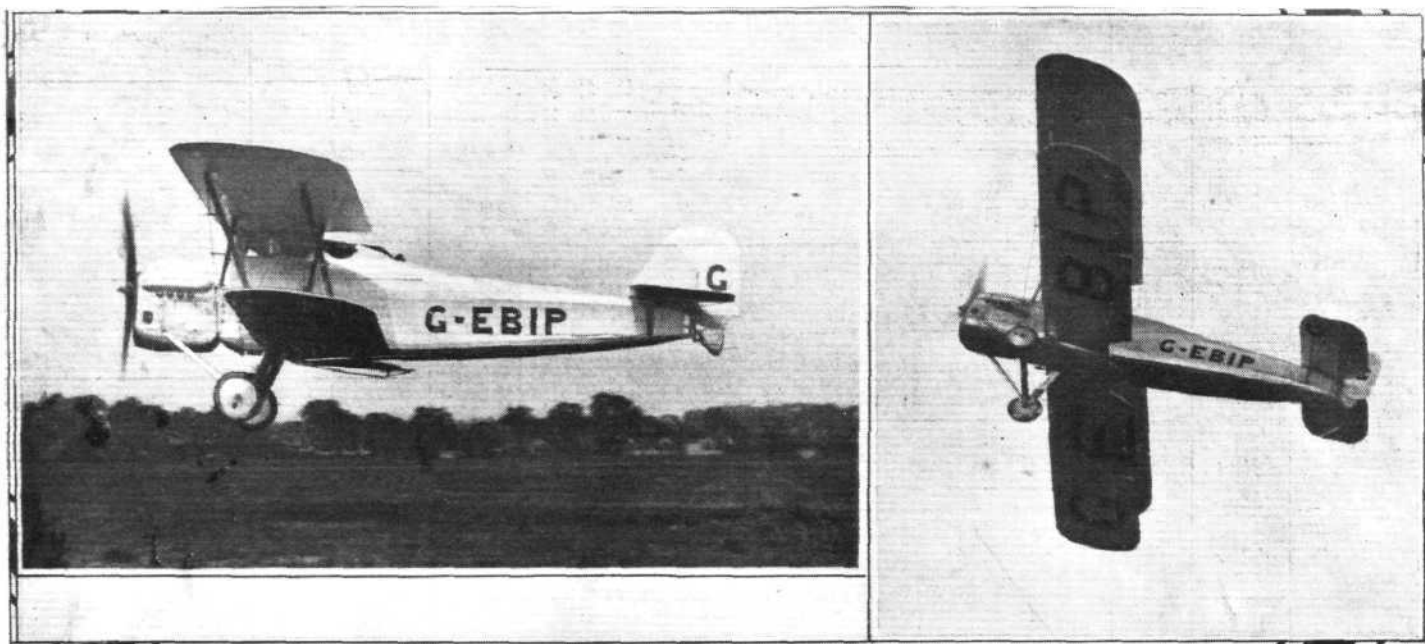
JULY 15, 1926

| Identification Letters. | Machine.            | Engine.                 | Entrant.                       | Pilot.                         | Handicap.        | Hendon Depart.   | First Circuit via Coventry-Cheltenham. |                  | Second Circuit via Martlesham-Cambridge. |                  | Fourth Circuit via Martlesham-Cambridge. |                 | Third Circuit via Coventry-Cheltenham. |                 | Total Time (732 Miles.) |
|-------------------------|---------------------|-------------------------|--------------------------------|--------------------------------|------------------|------------------|----------------------------------------|------------------|------------------------------------------|------------------|------------------------------------------|-----------------|----------------------------------------|-----------------|-------------------------|
|                         |                     |                         |                                |                                |                  |                  | Hendon Arrive.                         | Lap Time.        | Hendon Arrive.                           | Lap Time.        | Hendon Arrive.                           | Lap Time.       | Hendon Arrive.                         | Lap Time.       |                         |
| G-EBLI                  | D.H.60 "Moth"       | 27-60 "Cirrus I"        | Duke of Sutherland             | Capt. F. G. M. Sparks          | h. m. s. 4 41 35 | h. m. s. 10 10 0 | h. m. s. 12 36 33                      | h. m. s. 2 26 33 | h. m. s. 3 36 14                         | h. m. s. 1 59 41 | h. m. s. 6 6 47                          | h. m. s. 2 0 33 | h. m. s. 9 4 47                        | h. m. s. 2 28 0 | h. m. s. 8 54 47        |
| G-EBME                  | D.H.60 "Moth"       | 27-60 "Cirrus I"        | W. L. Hope                     | W. L. Hope                     | 4 41 35          | 10 10 0          | 12 24 44                               | 2 14 44          | 3 13 16                                  | 1 48 32          | 6 52 30                                  | 3 9 14          | Retired.                               |                 |                         |
| G-EBMO                  | D.H.60 "Moth"       | 27-60 "Cirrus I"        | Sir Chas. Wakefield            | Capt. H. S. Broad              | 4 41 35          | 10 10 0          | 12 24 19                               | 2 14 19          | 3 13 6                                   | 1 48 47          | 5 42 5                                   | 1 58 59         | 8 26 47                                | 2 14 42         | 8 16 27                 |
| G-EBLW                  | D.H.60 "Moth"       | 27-60 "Cirrus I"        | Maj. Gilbert Dennison          | Capt. W. J. McDonough          | 4 35 7           | 10 16 28         | 12 54 6                                | 2 37 38          | 4 2 3                                    | 2 7 57           | 6 32 0                                   | 1 59 57         | 9 33 36                                | 2 31 36         | 9 17 8                  |
| G-EBNO                  | D.H.60 "Moth"       | 27-60 "Cirrus II"       | Capt. G. de Havilland          | Capt. G. de Havilland          | 3 57 11          | 10 54 24         | 1 1 30                                 | 2 7 6            | 3 47 20                                  | 1 45 50          | Retired                                  | Hendon.         |                                        |                 |                         |
| G-EBIQ                  | D.H.51              | 120 "Airdisco"          | Air-Com. J. G. Weir            | Col. Master of Sempill         | 3 21 26          | 11 30 9          | 1 29 22                                | 1 59 13          | 4 6 57                                   | 1 37 35          | Retired                                  | Hendon.         |                                        |                 |                         |
| G-EBMC                  | Cranwell C.L.A.3    | 35 Bristol "Cherub III" | Sq.-Ldr. W. Thomas             | Flt.-Lieut. N. Comper          | 2 58 54          | 11 52 41         | 2 15 28                                | 2 22 47          | Retired.                                 |                  |                                          |                 |                                        |                 |                         |
| G-EBDK                  | Martinsyde F.6      | 200 Wolsley "Viper"     | Leslie Hamilton                | Leslie Hamilton                | 2 2 53           | Non-Start.       |                                        |                  |                                          |                  |                                          |                 |                                        |                 |                         |
| G-EBDO                  | D.H.37              | 300-330 "Nimbus"        | A. S. Butler                   | A. S. Butler                   | 1 49 42          | 1 1 53           | Retired.                               |                  |                                          |                  |                                          |                 |                                        |                 |                         |
| G-EBIP                  | Vickers "Vixen III" | 450 Napier "Lion"       | Douglas Vickers                | Flt.-Lieut. E.R.C. Scholefield | 1 42 16          | 1 9 19           | 2 35 32                                | 1 26 13          | 4 45 4                                   | 1 10 8           | 6 24 41                                  | 1 9 37          | 8 21 52                                | 1 27 11         | 5 13 9                  |
| G-EACZ                  | "Swallow" monoplane | 130 Clerget             | D. A. N. Watt                  | D. A. N. Watt                  | 1 39 23          | Non-Start.       |                                        |                  |                                          |                  |                                          |                 |                                        |                 |                         |
| G-EBOL                  | Nimbus Martinsyde   | 300-330 "Nimbus"        | Lieut.-Col. J. Barrett-Lennard | Capt. F. T. Courtney           | 1 20 54          | 1 30 41          | 2 58 39                                | 1 27 58          | Retired.                                 |                  |                                          |                 |                                        |                 |                         |
| G-EBOJ                  | Nimbus Martinsyde   | 300-330 "Nimbus"        | Lieut.-Col. M. O. Darby        | H. H. Perry                    | 1 20 54          | 1 30 41          | 2 59 22                                | 1 28 41          | 5 10 11                                  | 1 10 49          | 6 51 31                                  | 1 11 20         | 8 52 47                                | 1 31 16         | 5 22 6                  |
| G-EBKL                  | Martinsyde A.D.C.1  | 395 Siddeley "Jaguar"   | Lieut.-Col. M. O. Darby        | Sq.-Ldr. H. W. G. Jones        | 0 58 46          | 1 52 49          | 3 12 57                                | 1 20 8           | 5 19 14                                  | 1 6 17           | 6 53 30                                  | 1 4 16          | 8 43 51                                | 1 20 21         | 4 51 2                  |
| G-EBON                  | Parnall "Plover"    | 400 Bristol "Jupiter"   | George G. Parnall              | Sq.-Ldr. Sir C. J. Q. Brand    | 0 33 42          | 2 17 53          | 3 43 55                                | 1 26 2           | 5 57 33                                  | 1 13 38          | 7 34 41                                  | 1 7 8           | 9 29 9                                 | 1 24 28         | 5 11 16                 |
| G-EBMK                  | Bristol "Badminton" | 400 Bristol "Jupiter"   | Sir G. Stanley White           | Capt. F. L. Barnard            | Scratch          | 2 54 35          | 4 4 43                                 | 1 13 8           | 6 3 37                                   | 0 58 54          | 7 32 44                                  | 0 59 7          | Retired                                | Oxford.         |                         |

### Second Day, July 10.

| Identification Letters. | Machine.           | Engine.               | Pilot.                         | Hendon Depart. | First Circuit via Martlesham-Cambridge. |                  | Second Circuit via Coventry-Cheltenham. |                  | Third Circuit via Martlesham-Cambridge. |                  | Fourth Circuit via Coventry-Cheltenham. |                  | Total Time (732 Miles). | Total Time (1,464 Miles). | Average Speed. | Position. |
|-------------------------|--------------------|-----------------------|--------------------------------|----------------|-----------------------------------------|------------------|-----------------------------------------|------------------|-----------------------------------------|------------------|-----------------------------------------|------------------|-------------------------|---------------------------|----------------|-----------|
|                         |                    |                       |                                |                | Hendon Arrive.                          | Lap Time.        | Hendon Arrive.                          | Lap Time.        | Hendon Arrive.                          | Lap Time.        | Hendon Arrive.                          | Lap Time.        |                         |                           |                |           |
| G-EBMO                  | D.H.60 "Moth"      | 27-60 "Cirrus I"      | Capt. H. S. Broad              | h. m. s. 8 0 0 | h. m. s. 9 48 32                        | h. m. s. 1 48 32 | h. m. s. 12 32 45                       | h. m. s. 2 14 13 | h. m. s. 3 21 33                        | h. m. s. 1 48 48 | h. m. s. 6 5 53                         | h. m. s. 2 14 20 | h. m. s. 8 5 53         | h. m. s. 16 22 20         | m.p.h. 90.4    | 1         |
| G-EBLI                  | D.H.60 "Moth"      | 27-60 "Cirrus I"      | Capt. F. G. M. Sparks          | 8 30 0         | 10 38 53                                | 2 8 53           | 1 39 1                                  | 2 33 59          | 4 35 47                                 | 1 56 46          | 7 41 0                                  | 2 35 13          | 9 14 51                 | 18 9 38                   | 80.4           | 5         |
| G-EBLW                  | D.H.60 "Moth"      | 27-60 "Cirrus I"      | Capt. W. J. McDonough          | 9 13 17        | 11 11 29                                | 1 58 12          | 2 8 55                                  | 2 27 26          | 5 7 43                                  | 1 58 48          | 8 9 15                                  | 2 31 32          | 8 55 58                 | 18 13 6                   | 80.25          | 4         |
| G-EBIP                  | Vickers "Vixen"    | 450 Napier "Lion"     | Flt.-Lieut. E.R.C. Scholefield | 10 54 24       | 12 4 17                                 | 1 9 53           | 2 0 40                                  | 1 26 23          | 4 10 3                                  | 1 9 23           | 6 6 15                                  | 1 26 12          | 5 11 51                 | 10 25 0                   | 142.2          | 2         |
| G-EBOJ                  | Nimbus-Martinsyde  | 300-330 "Nimbus"      | H. H. Perry                    | 11 46 41       | 12 58 47                                | 1 12 6           | 2 57 54                                 | 1 29 7           | Retired.                                |                  |                                         |                  |                         |                           |                |           |
| G-EBKL                  | Martinsyde A.D.C.1 | 395 Siddeley "Jaguar" | Sq.-Ldr. H. W. G. Jones        | 17 59 53       | 1 6 50                                  | 1 6 57           | 2 57 29                                 | 1 21 24          | 5 2 51                                  | 1 5 22           | 6 53 20                                 | 1 20 29          | 4 54 12                 | 9 45 14                   | 151.9          | 3         |
| G-EBON                  | Parnall "Plover"   | 400 Bristol "Jupiter" | Sq.-Ldr. Sir C. J. Q. Brand    | 1 10 15        | Retired.                                |                  |                                         |                  |                                         |                  |                                         |                  |                         |                           |                |           |





[ " FLIGHT " Photographs

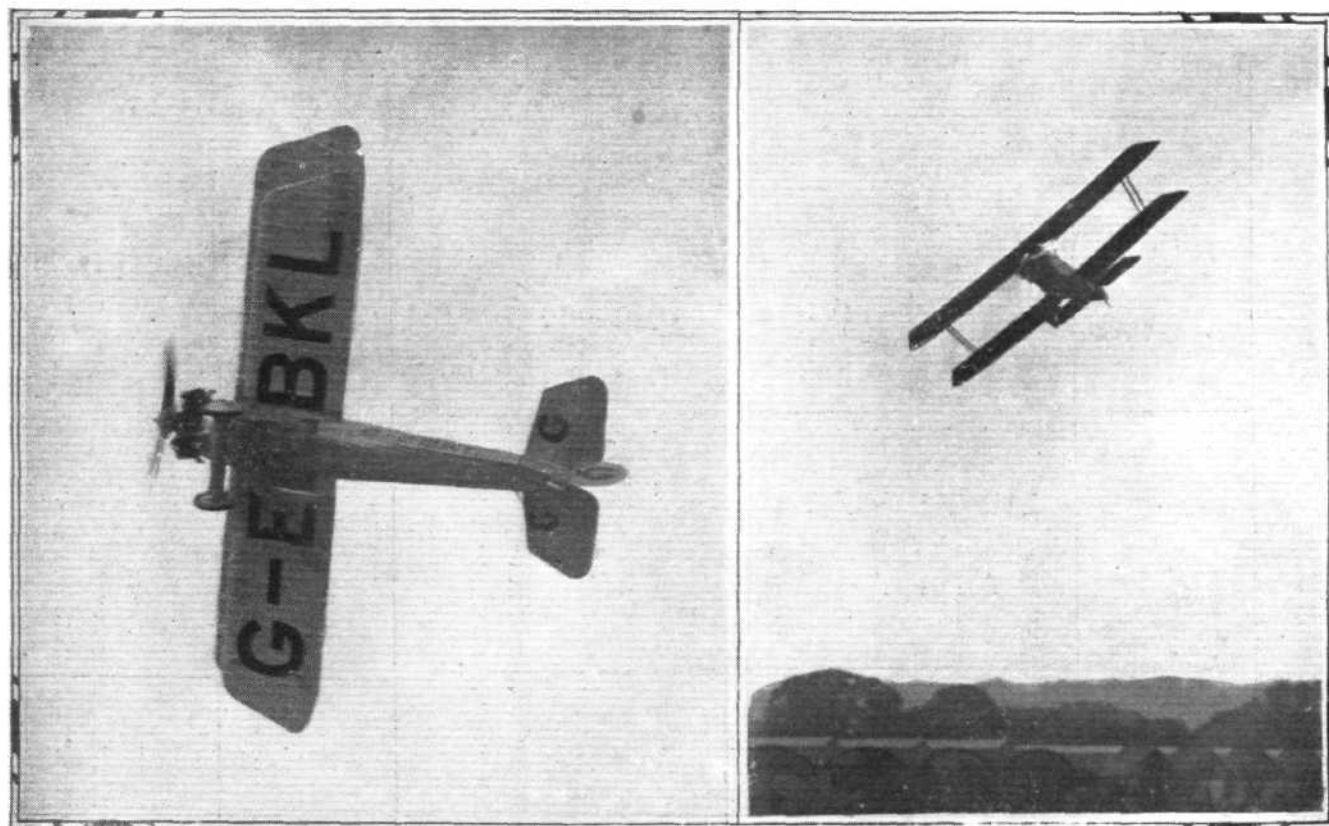
**SECOND IN THE KING'S CUP RACE :** Two views of the Vickers "Vixen III" (Napier "Lion"), piloted by Flt.-Lieut. E. R. C. Scholefield, who came in only 22 secs. behind Broad.

white and red Titanine finish and neat Fairey-Reed metal airscrew; L.A.C. brown and silver distinguished Sparks' G-EBLI, while Hope's G-EBME was dark blue and silver. The Midland Club "Moth," G-EBLW, was green and silver, and Capt. de Havilland's own mount (with "Cirrus II" engine), G-EBNO, wore sky blue and silver.

Just one hour after 8 a.m. it was 9 o'clock, but still the machines remained on the line and still the mist hung heavily—if anything worse than before. Guided, no doubt, by last year's happenings under similar conditions, when more than half the competitors were forced out of the race almost at

the start, the officials conferred and decided to postpone the start for another hour. There was nothing for it, therefore, but to wait and hope for better conditions—and wisely, too, we think.

In the meanwhile A. S. Butler went up to investigate on the D.H.37—now no longer "Sylvia," but "Lois," with a nice new "Nimbus" engine and dress of crimson. He was soon lost to view in the mist, but after a short spell returned and reported that, westward, visibility was not too bad and was improving. Meteorological reports from afar were also more promising. By the way, whilst on this subject we would like



[ " FLIGHT " Photographs

**THIRD IN THE KING'S CUP RACE :** Two views of the Martinsyde A.D.C.1 (Siddeley "Jaguar") completing two of his early laps.





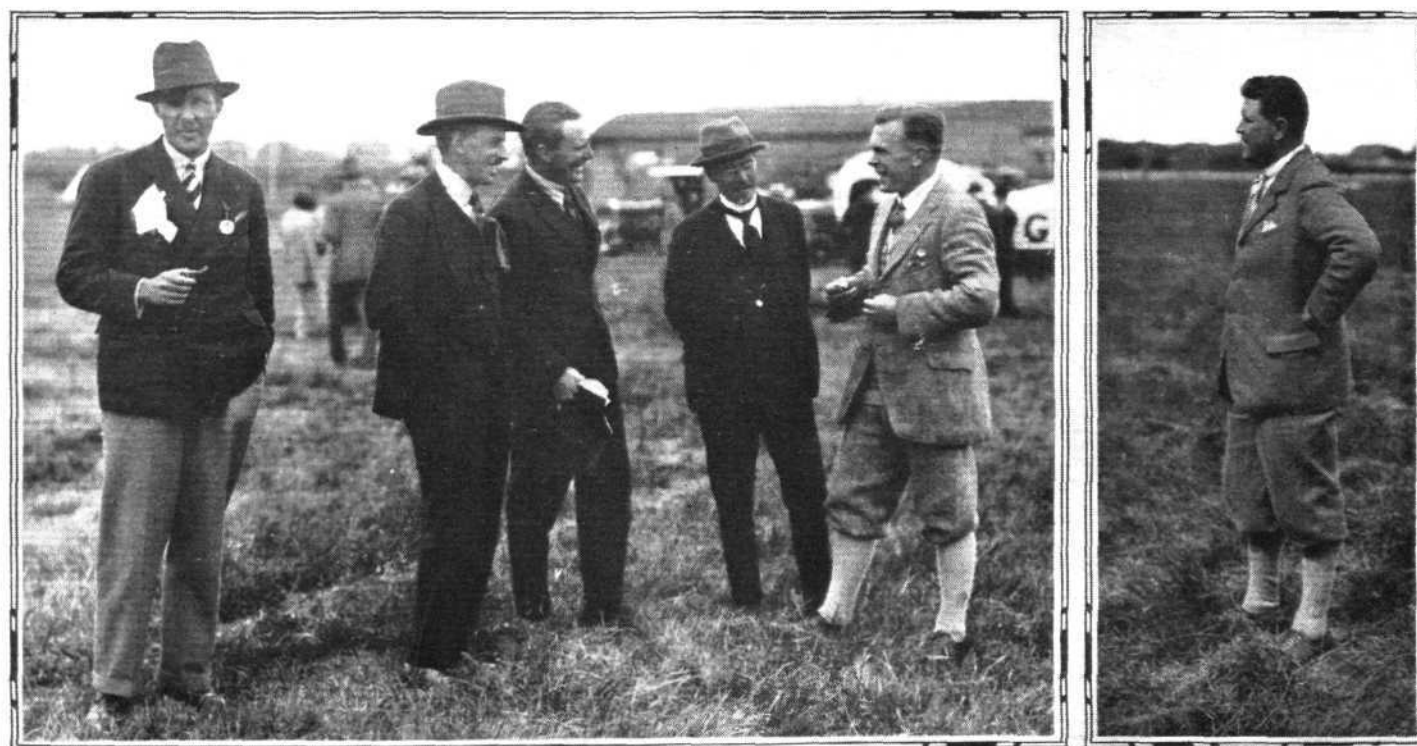
[“FLIGHT” Photographs]

**THE “MIDLAND MOTH”** : Capt. W. J. McDonough and the green D.H. “Moth” entered by Maj. Gilbert Dennison (Midland Aero Club). McDonough put up a plucky fight, and stuck it to the bitter end.

to mention that the meteorological section, Air Ministry, rendered valuable assistance to the pilots during the two days’ racing, and had a willing representative in Mr. Dean on the aerodrome, who kept the pilots supplied with weather reports from the various points of the course throughout the day, which aided them more than many would suppose. This is a

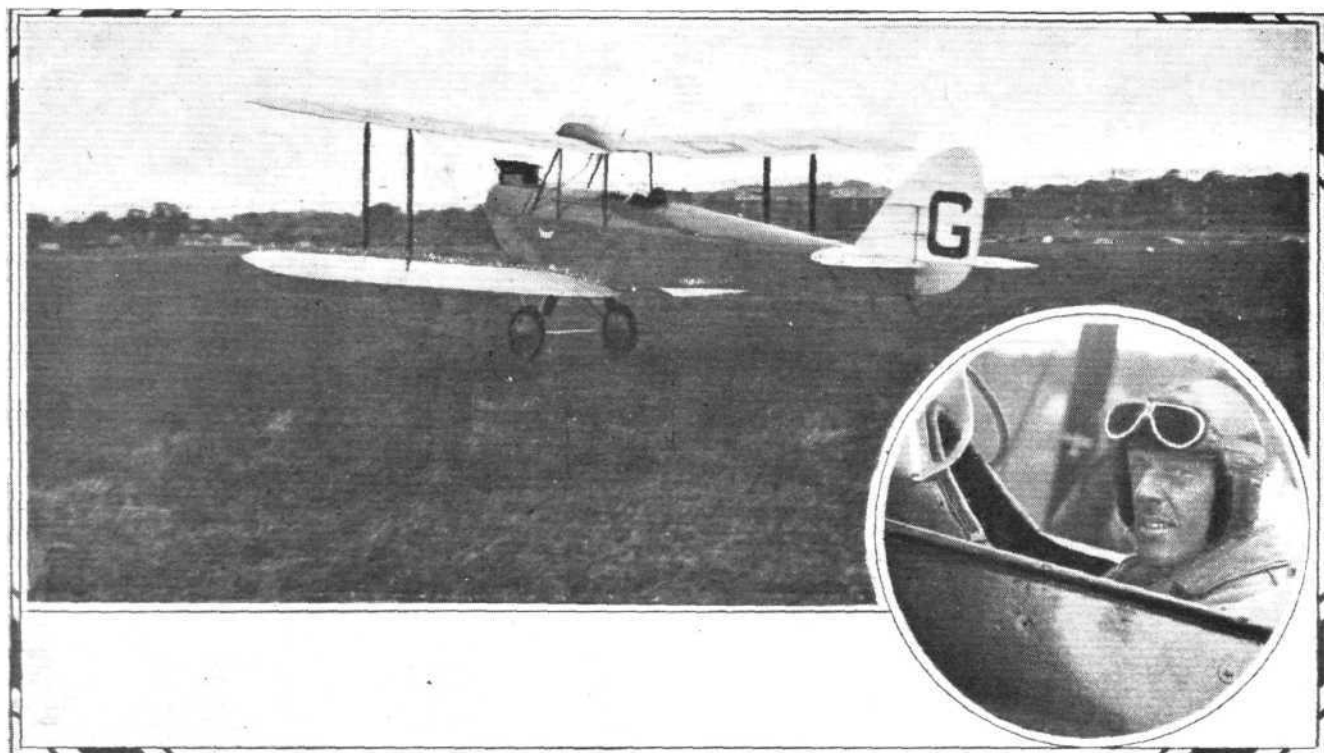
feature which should be adopted much more in air races, we think.

Thus, it was decided, at last, to make a start at 10.10 a.m., but instead of taking the Martlesham-Cambridge triangle first (as first arranged) the longer Coventry-Cheltenham one was substituted. And so, at 10.10 the three “Moths” piloted by



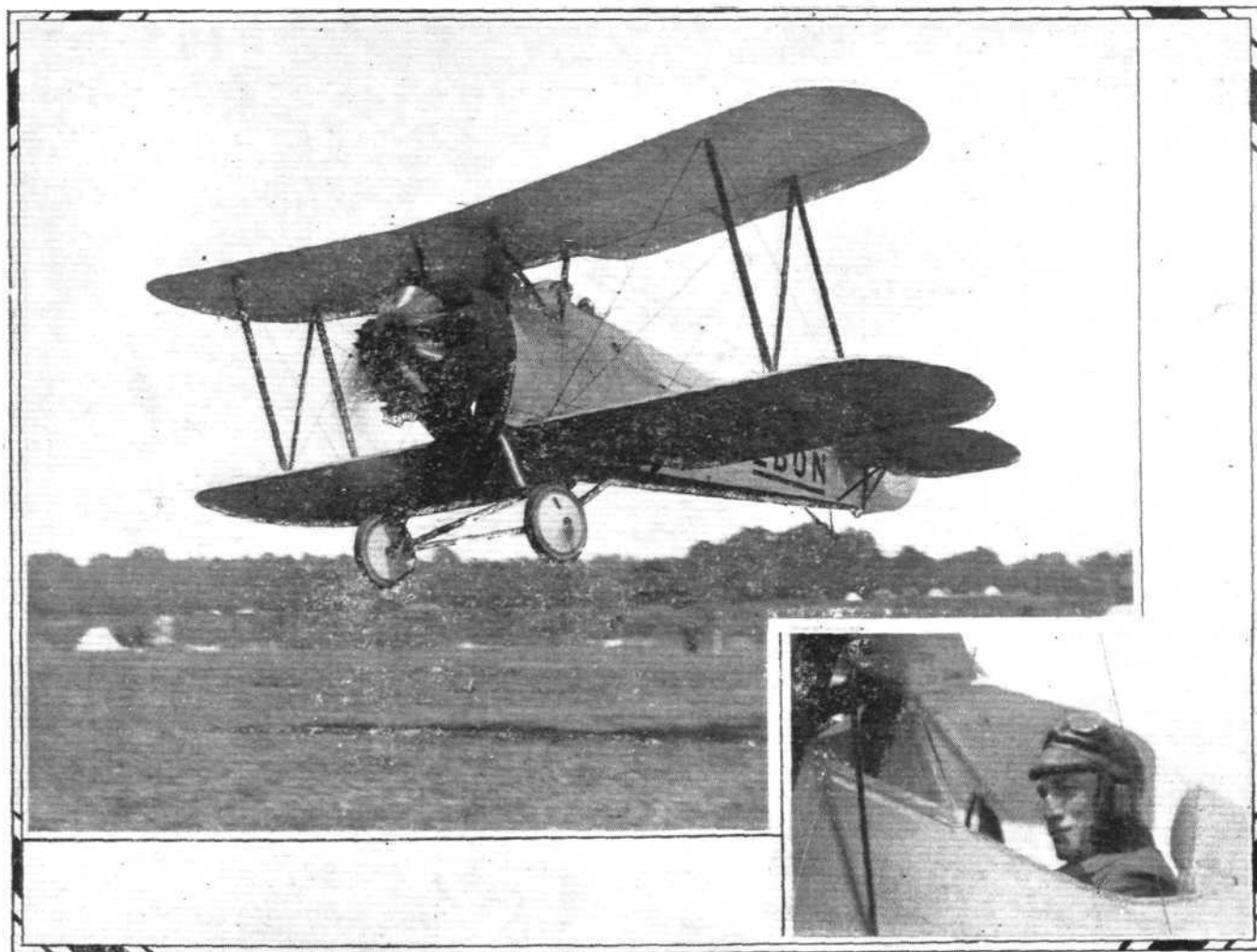
[“FLIGHT” Photograph]

**ORDERS TO QUIT** : Squad.-Ldr. H. W. G. Jones (centre), with his “A.D.C.s”—Maj. Stewart, Lieut.-Col. M. O. Darby, and J. Kenworthy—receives instructions from W. E. P. Johnson to depart on the Martinsyde A.D.C.1, for the King’s Cup Race. And on the right, “COUNTING THE REVS.?” : Flt.-Lieut. E. R. C. Scholefield, who piloted the Vickers “Vixen” (Napier “Lion”) almost to Victory in the King’s Cup Race.



[ " FLIGHT " Photographs ]

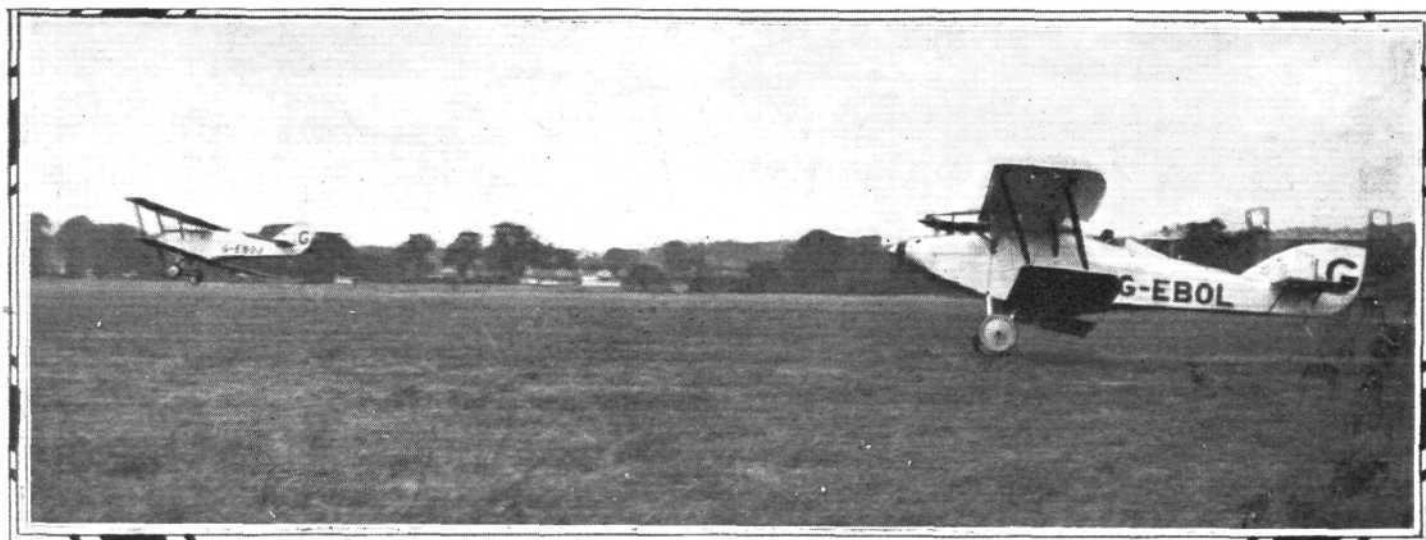
**WHEN " SPARKS " FLY :** Capt. F. G. M. Sparks and the brown D.H. " Moth " entered by the Duke of Sutherland (London Aeroplane Club) for the Fifth King's Cup Race.



[ " FLIGHT " Photographs ]

**A FINE GET-AWAY IN THE KING'S CUP :** Sq.-Ldr. Sir C. J. Q. Brand, and the Parnall " Plover " (Bristol " Jupiter " ), was another competitor that met with misfortune after making excellent progress during the first day's racing.





["FLIGHT" Photograph

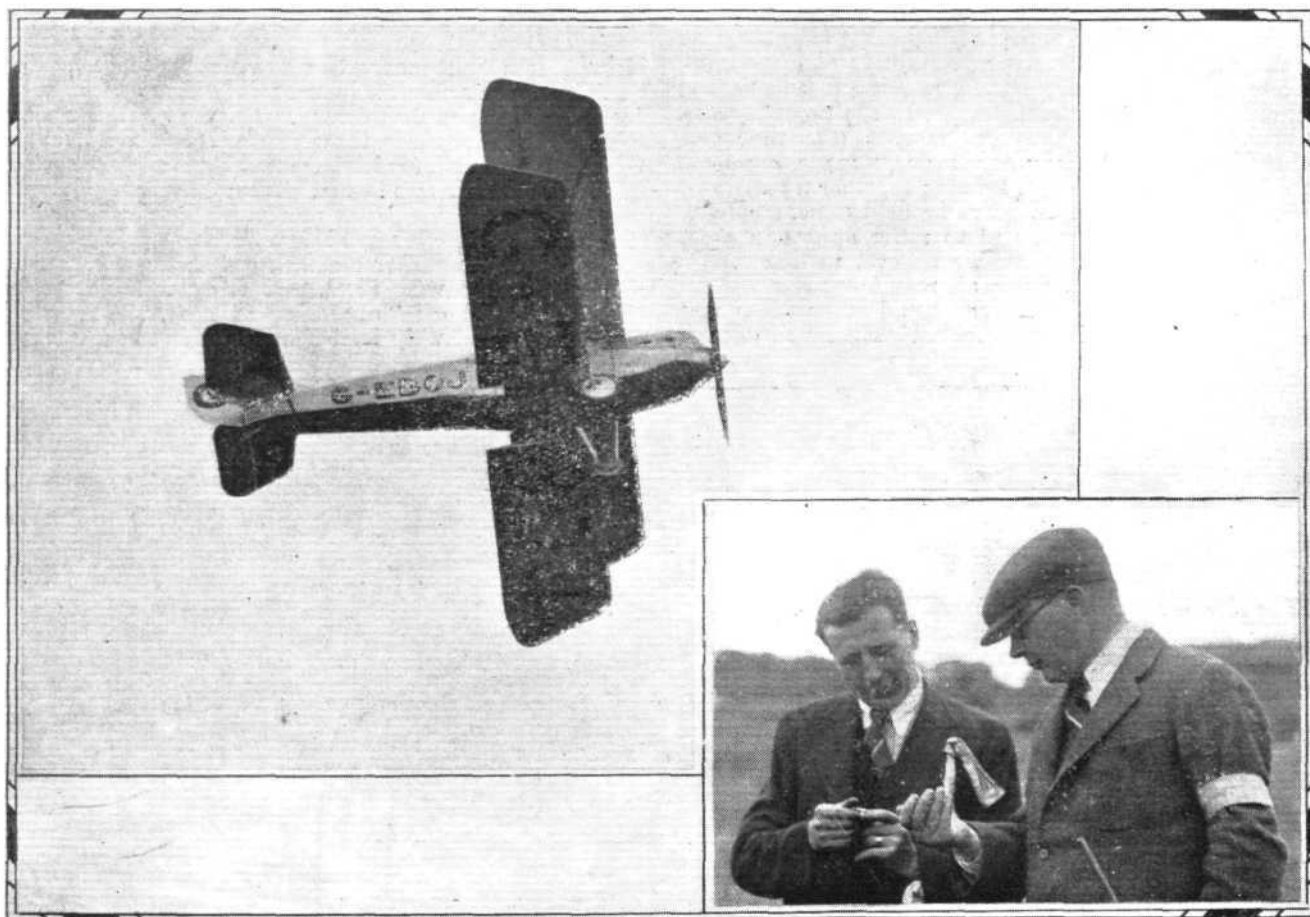
**"THE HEAVENLY TWINS":** The two Nimbus Martinsydes, piloted by Capt. F. T. Courtney (G-EBOL) and H. H. Perry (G-EBOJ) start off together on the first lap of the King's Cup Race at Hendon on Friday.

Broad, Hope and Sparks were duly sent on their 200-mile trip, followed six minutes later by McDonough on the green "Moth." After a short interval the last of the "Heterocera," piloted by Capt. de Havilland, was dispatched. Nearly half-an-hour later Col. the Master of Sempill got away on the D.H.51, and after him the last of the "smaller fry," the Cranwell light monoplane, set out, leaving the comparatively high-powered machines to wait an appreciable period before it was time for them to depart.

During this lull D. A. N. Watt went up on the "Swallow" and gave us a fine exhibition of stunt flying, while various Service machines and D.H.s from Stag Lane aerodrome near by flittered around. At 12.24 p.m. two "Moths" were observed coming in from Cheltenham. These proved to be

Broad and Hope, with only 25 seconds separating them. They had no sooner landed for their compulsory stop of one hour, when Sparks arrived, followed a few minutes later by McDonough. Another short wait and then the fifth, de Havilland's, "Moth" turned up, and a few seconds later Butler started off on his first lap.

From now on matters began to get a trifle confusing, for machines were returning from their first circuit as others set out on theirs. In fact, before the scratch man—Barnard, on the Bristol "Badminton"—had started on his first lap, six of the early starters were on their second. It is thus almost impossible to set out in writing the "goings and comings" of the various competitors at this point. It only remains to record that one competitor failed to put in an appearance



["FLIGHT" Photographs

**"AND THEN THERE WAS NONE":** Much disappointment was felt generally at the bad luck experienced by the two Nimbus Martinsydes in the King's Cup Race. Above is seen H. H. Perry banking on one of these 'buses, and inset, Col. Bristow gives him correct B.S.T.



["FLIGHT" Photographs]

**THE FIFTH KING'S CUP RACE :** Capt. F. L. Barnard—a previous King's Cup winner—and the Bristol "Badminton," on which he was unfortunately forced to land when on his last lap on the first day, owing to petrol feed trouble. Note Barnard's "fresh air breather tube."

after starting on his first circuit. This was Butler on the D.H.37, and the reason for his non-appearance was unknown at Hendon until later, when it transpired that he was forced to descend near Cheltenham, owing to a broken induction manifold.

Other early retirements were: Comper, on the Cranwell mono, who had to descend in bad ground during the second lap and damaged his machine; De Havilland, after completing the first circuit in excellent time, had to retire with a broken oil pipe; while Sempill had to retire just as he was starting out on the third circuit, owing to the breaking of a rocker arm. The two Nimbus Martinsydes (Courtney and Perry), otherwise the "Heavenly Twins," made excellent progress during the first circuit, keeping together by seconds, but on the third circuit valve trouble brought Courtney down near Cambridge. Hope, also, had to retire almost in sight of home, on the last lap, owing, we believe, to illness.

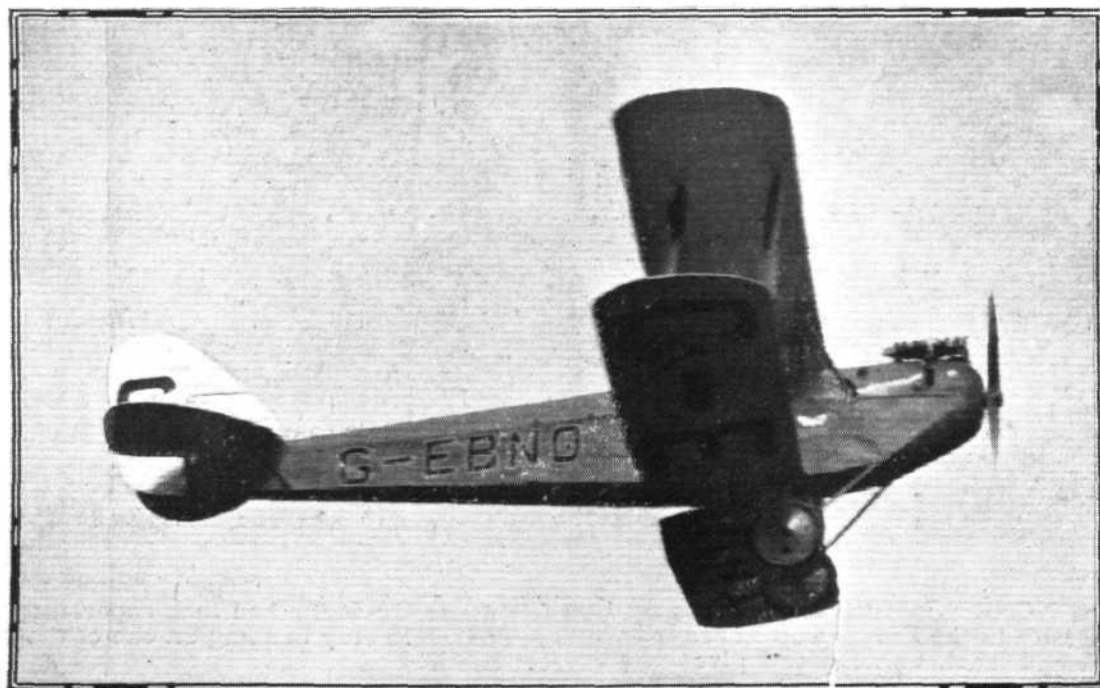
It was not until 8 p.m., when all remaining competitors were away on the last lap that one could settle down and await results with comparative clearness. The first to arrive

back was Scholefield, on the Vickers' "Vixen," and some five minutes later, Broad came in, having averaged over 90 m.p.h. for the 732 miles. About fifteen minutes later, Jones hurried in on the Martinsyde A.D.C.1., followed in nine minutes by Perry on the Nimbus Martinsyde.

The next in was a "Moth," with Sparks up, twelve minutes later, and after another short wait, Brand arrived in the "Plover," with MacDonough close on his tail in the last of the "Moths." By now it was after 9.30 a.m., and some anxiety was felt about Barnard on the Bristol "Badminton," for he was obviously overdue. At last, to everyone's relief, a 'phone message came through, shortly after 10 p.m., saying that he had landed (owing to petrol-feed trouble) at Oxford—nearly in the Thames!—and that neither pilot nor machine were hurt.

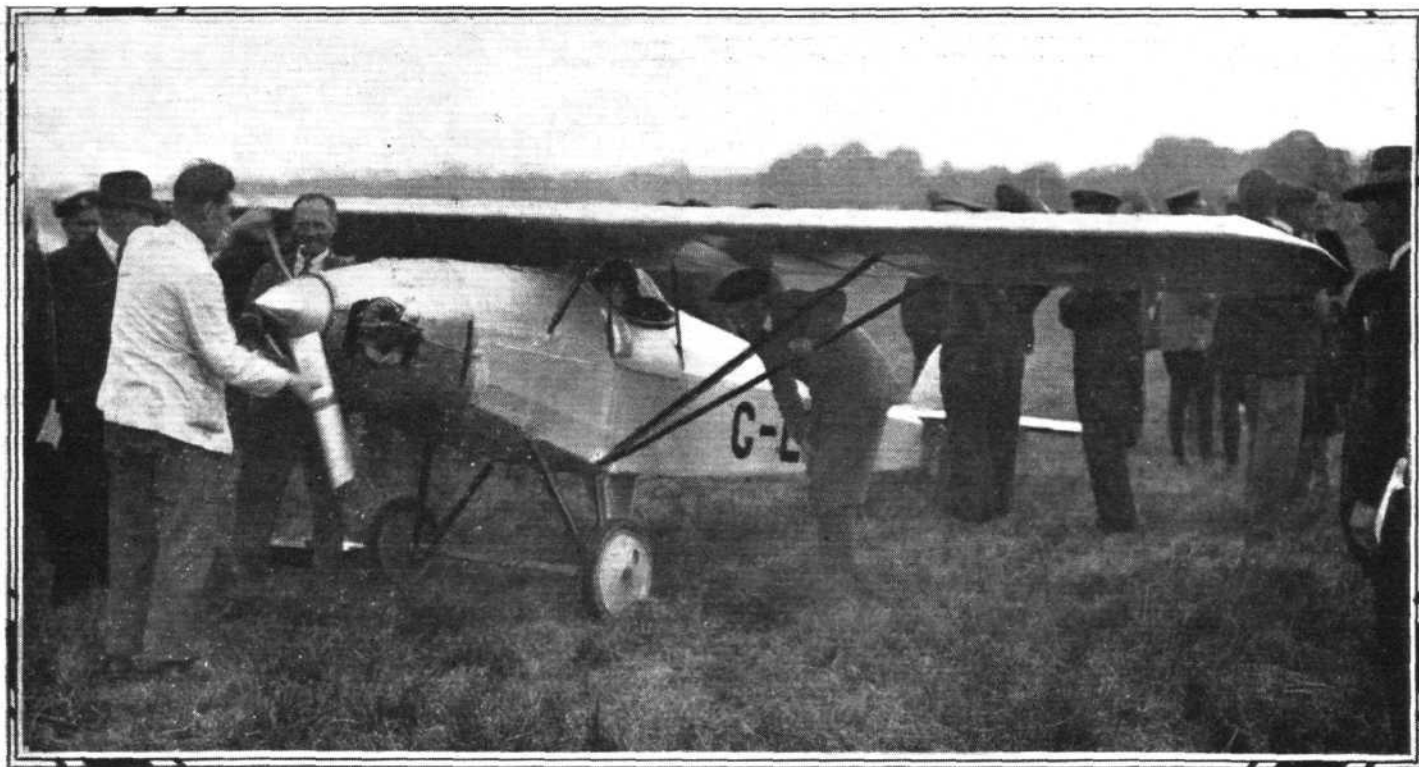
#### Second Day, July 10

Fortunately, weather conditions first thing on the second day of the race were ideal, and the seven remaining competitors started off "according to plan." The wind had however, considerably freshened and was more westerly and



"Designer, Entrant, and Pilot, too!": Capt. G. de Havilland not only entered one of his "Moths" for the King's Cup Race, but flew it himself. This machine had a new "Cirrus II" engine, and Capt. de Havilland was making excellent progress until forced out of the race by a very minor defect—a broken oil pipe.

["FLIGHT" Photograph]



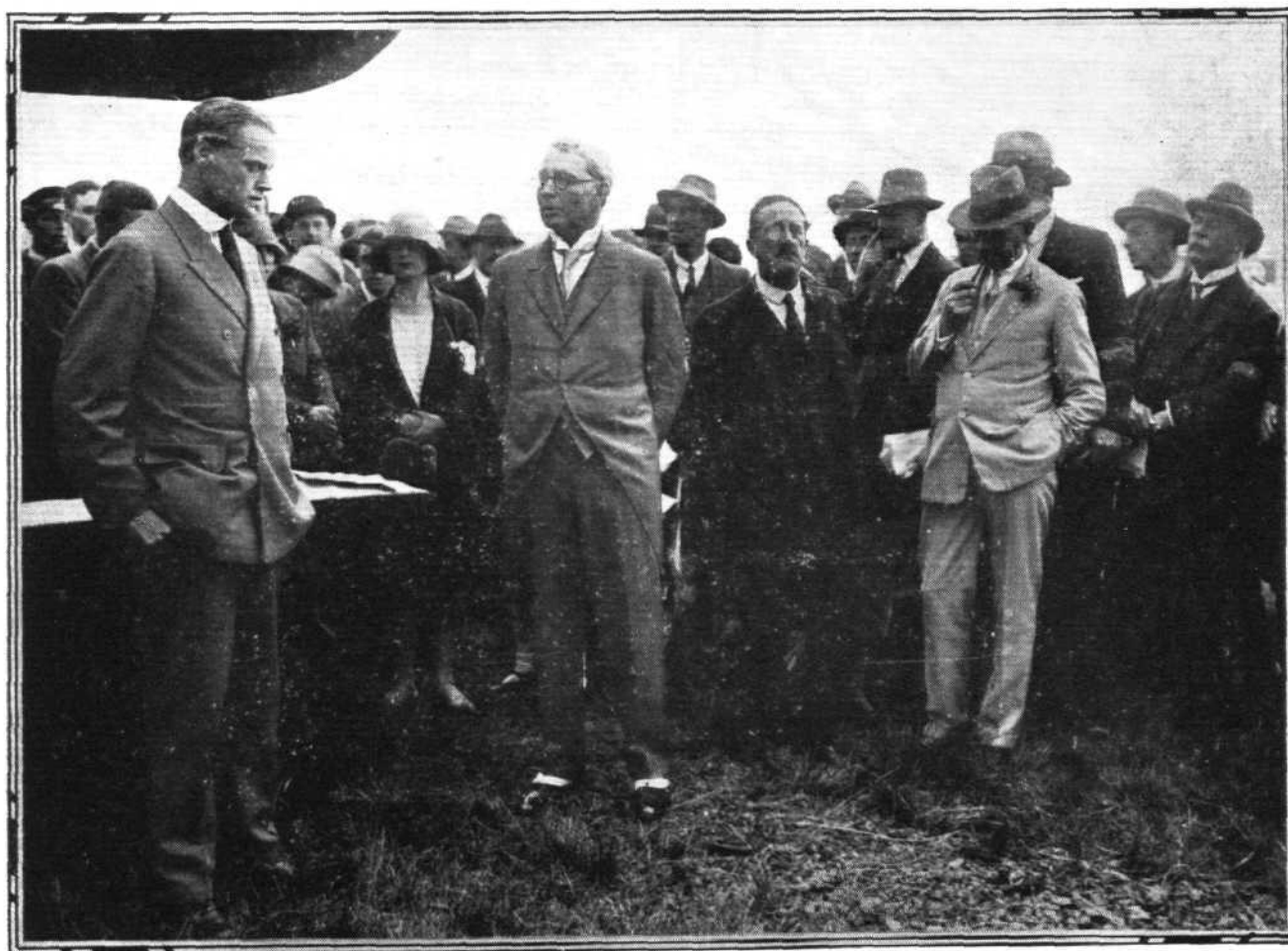
[“FLIGHT” Photograph]

**THE FIFTH KING'S CUP RACE :** Starting-up the Bristol “Cherub III” engine of the Cranwell C.L.A.3 monoplane, entered by Sq.-Ldr. W. Thomas (Cranwell Light Aero Club) and piloted by Flt.-Lieut. N. Comper.

was thus more or less against the competitors on the long leg to Coventry. There were many more spectators at Hendon during this second day—comparatively few turned up on Friday—and with perfect summer weather prevailing, and

plenty of “extra turns” in the way of flying, including an impromptu race, those that did trouble to come spent a very pleasant day.

With only seven competitors in the race, the second day's



[“FLIGHT” Photograph]

**ANOTHER “MOTH”, FOR THE LONDON AEROPLANE CLUB :** After he had presented the King's Cup to Capt. Broad, the Duke of Sutherland presented a D.H. “Moth” to the London Aeroplane Club. His Grace is seen here handing over the “Moth” to Lieut.-Col. Sir F. K. McClean, to the right of whom may be seen Sir Sefton Brancker, Sir Harry Brittain, Mr. Handley Page and Brig.-Gen. Sir Capel Holden.



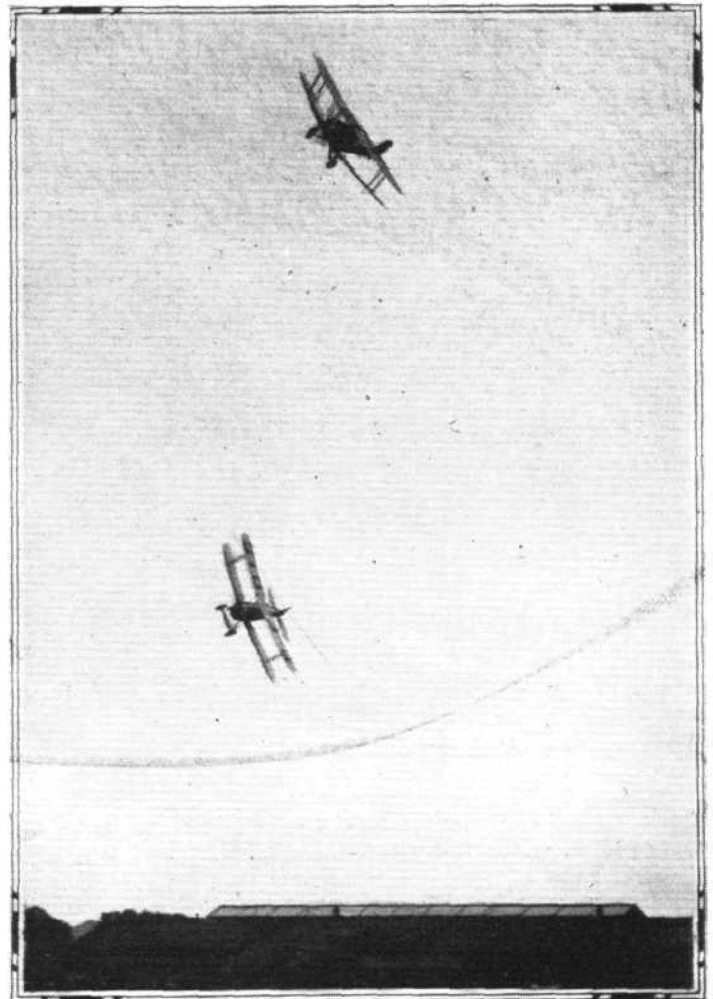
progress was much easier to follow, there being less overlapping. Broad was the first away at 8 a.m., and the others followed at intervals according to the time gained or lost on their handicap time the day previous. The last away was Brand, at 1.10 p.m., when all the others had already completed the first circuit. Brand, it should be mentioned, had no sooner started and had just got outside the aerodrome, when the filler cap of the petrol tank blew off, and he had to make a hurried, but beautifully executed, return to the 'drome. Things were soon put right, however, and he got away again, but a little later on it was announced that he had landed at Little Waltham (Chelmsford) and had retired from the race. The only other retirement that day was announced a little later, this being Perry on the remaining Nimbus Martinsyde, who experienced trouble at Strafford St. Mary on the third circuit. No other mishap occurred except for a half-minute lost in starting by Jones on the Martinsyde A.D.C.1.

All competitors made very good times on their various laps, and it will be seen from our table of results that, with one or two exceptions, their lap times were remarkably consistent, and, having more or less mastered our mental slide rule, we were able to guess the arrival times of each competitor with comparative accuracy.

As the race was drawing to a close, and there happened to be intervals of longer duration, the officials organised a handicap race over a course to points just outside the aerodrome, and succeeded in herding together some 14 entrants—most of whom seemed to drop in from the skies as if by magic. This event was in two heats and a final. In the first heat there were six starters on well-assorted mounts, viz., a Short "Satellite" mono, Avro-Renault, three "Moths," and a D.H. 51. Eight more varieties started in the second heat—D.H.9J, D.H.9A, Bristol "Bloodhound," "Moth," "Swallow," Breguet (?) and 2 S.E.5B, the two latter presenting many thrills on the turns. The final produced the following result: (1) Flight-Lieut. Boyes, Short Satellite (ABC "Scorpion"); (2) Master of Sempill, D.H. 51 ("Airdisco"); (3) Mr. Lingham, S.E.5A (Savage Sky-Writing Co.).

At 6 p.m. everyone got ready to see the finish of the big race, and presently a machine was spotted coming in low down from the west; it was soon recognised as Broad's "Moth," and at the same time an obviously faster 'bus hove into sight, which proved to be Scholefield's Vickers "Vixen." Broad, of course, received a tremendous ovation, and, somehow, Scholefield seemed left out very much in the cold, although he was but 22 secs. behind. Broad was "chaired" to the Duke of Sutherland, who forthwith congratulated him and handed over the King's Cup. As Broad refused to make a speech, Sir Harry Prittain (Napier's) came to the rescue and said a few words for him. Once released, Broad made good his escape, and attention was directed to another little ceremony.

This was the presentation by the Duke of Sutherland of a new "Moth" to the London Aeroplane Club. His Grace had previously made a flight in this machine (piloted by S. L. S. St-Barbe), which was gratefully received by Lieut.-Col. Sir F. K. McClean.

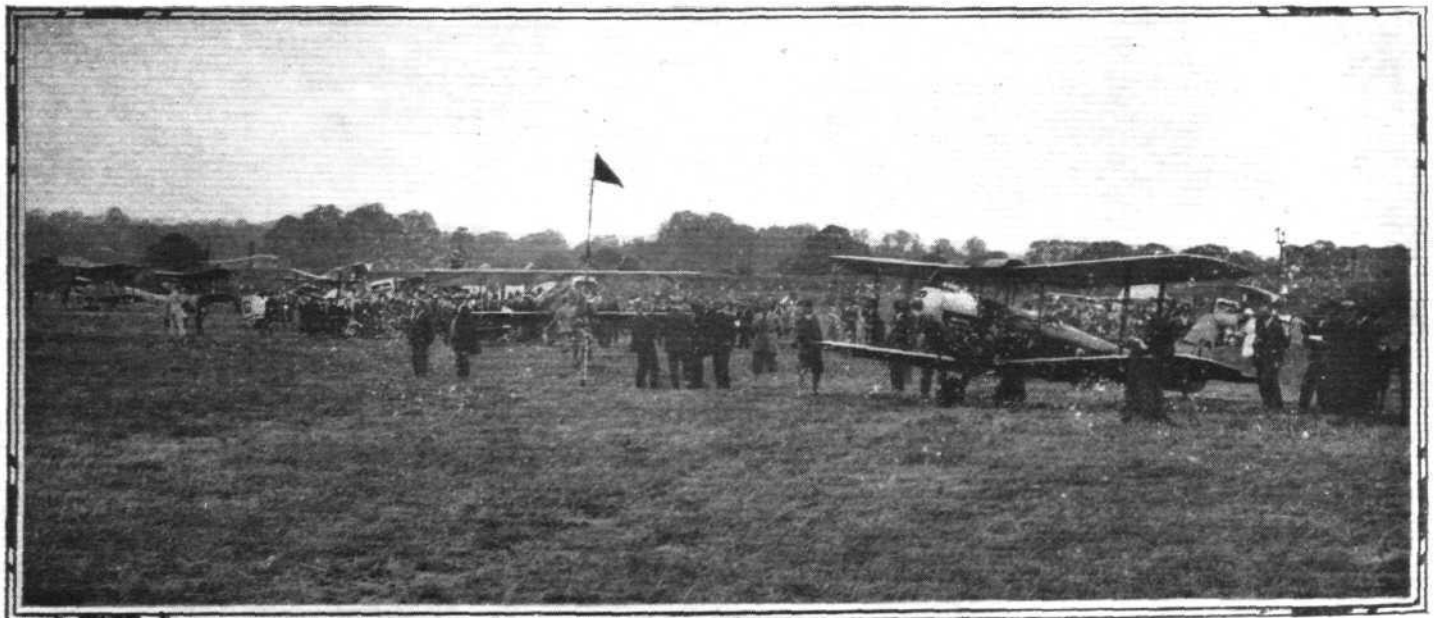


"FLIGHT" Photographs

**AN EXTRA TURN AT THE KING'S CUP RACE :** An S.E.5 (Savage Sky-Writing) and a Bristol "Bloodhound" put up some smart banking during the impromptu race at Hendon last Saturday.

After this little ceremony many started to go home, but a few waited for the return of the remaining three competitors, who eventually arrived thus: Jones (Martinsyde A.D.C.1), 6.53; Sparks ("Moth"), 7.41; and McDonough ("Moth"), 8.9. And so ended a really interesting race.

This year, there being no "controls" outside Hendon, we have no reports from other districts, with the exception of one from Cheltenham, which will be found on p. 437.



["FLIGHT" Photograph

**AN INTERLUDE AT THE KING'S CUP RACE :** The line-up for the first heat of the impromptu race, which was held during the lulls in the main race.

# THE ROYAL AERO CLUB OF THE U.K.

## OFFICIAL NOTICES TO MEMBERS

### BANQUET TO LIEUT.-COL. SIR FRANCIS K. McCLEAN

THE Royal Aero Club will give a banquet to Lieut.-Col. Sir Francis K. McClean, as a mark of appreciation of the honour of knighthood recently conferred upon him by His Majesty the King. Any friends, whether members of the Royal Aero Club or not, may attend.

The banquet will be held at the Savoy Hotel, on Tuesday, July 27, 1926, at 7.30 for 8 o'clock. Tickets £1 1s. each.

The Duke of Sutherland will preside.

At this banquet the King's Cup will be presented to Sir Charles Wakefield and the additional prizes to the various winners.

### THE KING'S CUP AIR RACE

Mr. J. D. Siddeley, of Coventry, sent a wireless message to Hendon just prior to the start of the King's Cup race, offering a prize of £50 for the first machine home with engine of under 80 h.p.

**Hendon Handicap Race.**—In addition to the prizes of £10, £5 and £2 10s. offered by the Royal Aero Club, Mr. H. S. Tegner, a member of the club, offered additional prizes of £10 and £5.

Offices: THE ROYAL AERO CLUB,

3, CLIFFORD STREET, LONDON, W. 1.

H. E. PERRIN, Secretary

## LIGHT 'PLANE CLUB DOINGS

### London Aeroplane Club

The total flying time for the week ending July 11 was 53 hrs. 20 mins. The following members had flying instruction: R. V. Banks, Miss O'Brien, C. E. R. Brocklebank, M.P., F. W. R. Martino, L. J. C. Mitchell, J. H. Saffery, G. W. Hall, K. V. Wright, L. Martin, G. M. Randall, H. R. Thomas, T. W. Eady, A. J. Richardson, H. R. Presland, G. W. Hall, C. L. Harrison, P. O. A. Davison, B. B. Tucker, E. K. Blyth, H. G. Harwood, R. C. Presland, G. N. Howe, T. C. Elford, T. W. Heath, A. Southgate, E. L. O. Baddeley, J. A. Simon, E. A. Lingard.

The following members made solo flights: E. L. O. Baddeley, W. Hay, A. H. M. Lees, Maj. K. M. Beaumont, G. Wallcousins, Capt. W. Roche Kelly, S. O. Bradshaw, N. Jones, R. C. Presland, N. J. Hulbert, A. R. Ogston, L. J. C. Mitchell, G. H. Craig, E. S. Brough, A. Lees, E. E. Stammers. Joy rides were given to the following associates: L. G. Valpy, Miss MacCallum, B. Waugh.

**1,000 Hours' Flying.**—The London Aeroplane Club during the past week completed its 1,000 hours' flying. The London Club is the first to attain his figure.

**Duke of Sutherland Presentation "Moth."**—On Saturday, July 10, at Hendon, the Duke of Sutherland, after making a flight in D.H. "Moth" G-EBNY, piloted by S. L. F. St. Barbe, formally handed it over to the London Aeroplane Club. Lieut.-Col. Sir Francis K. McClean, chairman of the Committee of the London Aeroplane Club, expressed the warmest thanks of the members to the Duke of Sutherland for his generous gift.

**Members' Pavilion.**—The club has acquired a small pavilion which has been erected close to the club hangar. The proceeds of the club dance held in January last, amounting to about £30, will be devoted to furnishing the pavilion for the comfort of the members, and Mrs. Woods Humphery has kindly undertaken to carry this out.

### Hampshire Aeroplane Club

The first annual general meeting of the club was held in the Southampton Chamber of Commerce on June 16. About 40 members were present, when the chairman of the Interim Committee, Mr. O. E. Simmonds, opened the meeting by outlining the very satisfactory and substantial progress that had been made since the inaugural meeting on March 2. In short, the main object, that of obtaining a £4,000 subsidy from the Air Ministry, had been achieved, while the club was promised delivery of two De Havilland *Moth* machines early next month, when activities would commence on the aerodrome at Hambly, placed at the club's disposal by Messrs. A. V. Roe and Co., Ltd.

Arrangements were well in hand for most attractive club room accommodation, which it is hoped to have available by the opening date.

A set of rules and regulations had been drawn up, and these were read to the meeting and ratified after some discussion on the various points that arose. In the course of dealing with the rules it was decided that the reduced entrance fees, introduced with the object of strengthening membership at the crucial period when application was being made to the Air Council for recognition, were no longer justified, and that the full entrance fees would apply to all future applications for membership.

The Interim Committee, its work completed, then resigned, but its members were re-elected *en bloc* to the new committee, which it was decided should carry on until December, 1927.

The members of the committee thus elected were Messrs. R. H. Sound, A. N. Clifton, R. V. Perfect, O. E. Simmonds, F. C. Stokes, and A. R. Van den Bergh. In addition Mr. N. J. Bishop was also elected to the committee, while it was unanimously agreed that Mr. R. Bishop should represent the associate members on that body.

Mr. R. V. Perfect was elected Hon. Assistant Secretary, the committee obtaining power to co-opt an Hon. Secretary and Hon. Treasurer at a later date.

Finally, Mr. C. C. Sharp and Mr. J. Taylor Matthews, two gentlemen who had given the committee a great deal of assistance on the legal side of the

club's formation, were elected Hon. Solicitor and Hon. Auditor to the club respectively.

The meeting then closed at a late hour, with a politely expressed desire on the part of the authorities to evict the members of the Hampshire Aeroplane Club into Above Bar Street, Southampton.

### The Lancashire Aero Club

MACHINES in use, GEBMQ. The weather had been bad. Mr. Stack gave instruction to: Messrs. Fallon, 50 mins.; Rodman, 45 mins.; Cross-thwaite, 40 mins.; Leigh, 35 mins.; Agar, 30 mins.; Anderson, 30 mins.; Hardy, 25 mins.; Gerrard, 25 mins.; Crabtree, 20 mins.; Goodyear, 10 mins.; Scott, 10 mins.; Collison, 10 mins.; Leeming, 5 mins. Total, 5 hrs. 35 mins.

Mr. Cantrill gave instruction to: Messrs. Fray, 25 mins.; Jenkinson, 20 mins.; Gattrell, 20 mins. Total, 1 hr. 5 mins.

Mr. Scholes gave instruction to: Messrs. Cross-thwaite, 1 hr.; Davison, 30 mins.; Tummers, 30 mins.; Foxcroft, 20 mins.; Brown, 20 mins.; Hardy, 20 mins.; Newton, 20 mins.; Fallon, 20 mins.; Crabtree, 20 mins.; Leeming, 20 mins.; Lowe, 15 mins.; Burt, 15 mins. Total, 4 hrs. 50 mins.

Tests occupied 55 minutes. Solo flights by Messrs. Leeming, 1 hr. 30 mins.; Goodfellow, 30 mins.; Lacayo, 25 mins.; Crabtree, 5 mins. Total solo, 2 hrs. 30 mins. Total time flown, 14 hrs. 55 mins.

The aerodrome will be closed on Friday, July 23, at 4 p.m., until Sunday, July 26, at 2 p.m., as four of the club's machines will be away at the Yorkshire Flying display. A party of members are going to Sherburn for this occasion, and it is hoped that all who can will assemble at Sherburn Aerodrome, near Leeds, on the morning of July 24.

### The Newcastle-upon-Tyne Aero Club, Ltd.

FLYING report for week ending July 11.

The club is still without an instructor, Mr. J. D. Parkinson not being due to arrive until July 12, but the pilot members have kept things moving as much as possible. Only one machine is on service, otherwise Sunday, the 11th, should have been a big day. However, the second engine has been returned after overhaul and the machine will be on service early in the coming week.

The following are particulars of flying carried out:—

Total time, 5 hours. Mr. R. N. Thompson carried Mr. A. D. Bruce as passenger on one flight. Mr. Baxter Ellis flew with Mr. A. D. Bruce, Mr. J. M. Davidson (two flights), Mrs. Davidson, Dr. Dixon, and Mr. G. H. Waugh. Mr. N. S. Todd carried the following passengers: Mr. J. Bell (taking photographs), Mr. Howard, Mr. and Mrs. A. H. Bell.

On Sunday, the 11th, Air Commodore J. G. Weir and Mrs. Weir visited the aerodrome for tea and petrol, in the course of a journey from London to Glasgow on the D.H.51A. There were a number of members on the aerodrome at the time and all were agreeably surprised to see the smart machine arrive, though it does make the *Moths* look rather small and ordinary. It was a beautiful day, and the 51 looked very nice in the air. Air Commodore and Mrs. Weir submitted, good naturedly, to being photographed before taking off and later kindly manoeuvred the machine so that it could be photographed from a *Moth* by means of an aerial camera in the air.

Since the large hangar has been made waterproof (or nearly so) Badminton has become a popular pastime and it appears that it may shortly be difficult to select the team to meet that which challenged the club some time ago. The game is being taken as seriously as flying has been, and the challengers will require to get in some practice. Needless to say Mr. R. H. Thompson is the prime mover in the game.

### The Southern Aero Club

REPORT for the week ending July 11. Total flying time, 4 hrs. 27 mins., all on G.E.A.T.U. The attendance of members at the aerodrome has been fairly regular, but, owing to light rain and ground mists, little flying has been possible.

The following members had instruction: Messrs. Orford, Naunton, Boulding and Baxter; and Mr. Parker made a short solo flight.

business. Through these changes the board will consist for the most part of active directors.

### A Correction

IN the rush of getting out a special issue of *FLIGHT* it is almost impossible entirely to avoid making mistakes, nor did we escape altogether in producing the supplement to *FLIGHT* of July 1. Our attention has been called to the text which accompanied the photograph of the Hawker "Hornbill," in which reference was made to Mr. Camm as the designer of this machine. We have been asked to point out that the "Hornbill" was designed under the direction of Mr. W. S. Carter, and was completed a few weeks prior to his resignation of the post of chief designer to the Hawker Engineering Co., Ltd.

### New Armstrong Directors

IMPORTANT additions and changes have been made at Sir W. G. Armstrong, Whitworth and Co. Three new directors have been added, viz.: Mr. J. D. Siddeley, managing director of Armstrong-Siddeley Motors; Mr. James Hawson, C.A., Edinburgh, late vice-president and director of Algoma Steel Corporation and other companies; Mr. J. P. Davison, general sales manager, Sir W. G. Armstrong, Whitworth and Co. At the same time important changes in the management of the company are announced. Mr. J. Frater Taylor becomes vice-chairman of the board and chairman of the executive committee. Mr. J. D. Siddeley becomes managing director (senior) and chairman of the committee of management, and will give his special attention to the manufacturing end of the



# THE DANIEL GUGGENHEIM FUND

## An "Open International Aircraft Competition" to be Held

READERS of FLIGHT will recollect that at one of the monthly house dinners of the Royal Aero Club there were present Mr. Harry Guggenheim and Admiral Cone, of the United States, and that it was humorously stated that Mr. Guggenheim was "the possessor of a hoard of gold," some of which he proposed to devote to the promotion of aeronautics. At the time Mr. Harry Guggenheim, son of Mr. Daniel Guggenheim, the donor of the sum of \$2,500,000 towards promoting aeronautics, was visiting Europe with Admiral Cone in order to study aviation conditions. As a result of this visit the board of management, of which Mr. Harry Guggenheim is president and Admiral Cone vice-president, has now formulated a policy, according to which the development of safety in flying is to be the chief aim in allocating the fund, and one form which it is proposed this development should take is the holding of what is termed an "Open International Aircraft Competition." This competition, naturally enough, is to be held in the United States, and it is stated that experts from many countries will be consulted in framing the rules for such a competition. It is probable that \$150,000 to \$200,000 will be appropriated for the purpose of this competition.

In a statement authorised by Mr. Harry Guggenheim it is pointed out that the fund might have devoted its efforts to the development of aerodromes, sound policies of government control, development of meteorological and communication services, and the perfection of flying administration to the end that aerial transportation should be operated in the same orderly manner as rail and marine transportation. All of these are important matters, but are, for the most part, government functions and secondary, it is believed, to the development of safety.

The primary reason for the slow commercial development of aviation in the United States and for its unsatisfactory financial status in those countries where, through government subsidies, air lines are established, would seem to be lack of public confidence in flying. The success of commercial aviation should be assured the day that the public can be convinced not by statistics, but by actual demonstration, that aeroplanes are inherently no more dangerous than steamships or railroads.

From fundamental research work now in progress and from the construction of some new types of aeroplanes involving a number of radical aerodynamic departures from the conventional aeroplane, sufficient progress has already been made in the direction of safety to justify faith that a complete solution of this problem is possible and that it may even be very near at hand. Indeed, today flying is actually much safer than it is generally assumed to be.

Major R. H. Mayo, who is consulting engineer and representative of the fund in England, has summarised as follows the essential characteristics of the present-day aeroplane which make the development of the safety factor necessary:—

"(1) The landing speed is far too high, and the length of run after landing is too great.

"(2) The gliding angle is too flat, making the approach to a given spot for landing too difficult.

"(3) The length of run required before taking off is too great.

"(4) The angle of ascent after taking off is not great enough.

"(5) If the aeroplane is stalled, it becomes unstable and at the same time control is lost. . . ."

In spite of these difficulties, however, inquiry discloses the fact that great strides are being made in meeting them fundamentally.

In England, for example, great progress has been made recently towards the solution of the problem of inherent stability and complete control at low speeds. Prof. B. Melvill Jones at Cambridge has done, and is continuing to do, highly important fundamental work on this subject, the value of which is demonstrated in Mr. Handley Page's slot and aileron control. Capt. G. T. Hill's tailless aeroplane is another highly important step in the direction of inherent stability. Senor de la Cierva's extraordinary new development for flight, the Autogiro, also is being actively promoted in England.

In addition to the International Competition, details of which will be announced from time to time, the trustees of the Daniel Guggenheim Fund have authorised its officers to make a careful investigation and prepare further specific recommendations working towards:—

(1) The encouragement of the perfection of flying instruments and accessories with particular regard to the perfection of radio or other aids to navigation and the control for fog flying.

(2) The encouragement of research in aerology.

(3) The encouragement of development of means to prevent collision.

(4) The encouragement of development of aircraft with motor accessible in flight.

(5) The encouragement of development of fire and splinter-proof fuselage.

Flying is now entering upon a new era, and the world is on the verge of developments which will make it clear that, not only is flying over great distances mechanically feasible, but that the whole art and science can be made so nearly accident-proof as to place flying on a basis of safety comparable with travelling by rail, steamship or automobile.

# THE GERMAN SEAPLANE COMPETITION

## 13 Machines Entered

For the German seaplane competition which commenced at Warnemünde on Sunday last, July 11, and which will continue until July 27, 13 machines have been entered. It is of interest to note that there are several British aero engines in this competition. The entries are as follows:—The Luftfahrzeug Gesellschaft of Stralsund has entered three machines, types L.F.G. V.59, V.60, and V.61, of which the first two are fitted with 240 h.p. BMW IV engines, and the third, the V.61, with Bristol "Jupiter." The Caspar Works have entered one machine, the type C.29 twin-float seaplane, but no information is available concerning the engine fitted. The Rohrbach Metallflugzeug Gesellschaft has entered two flying-boats, each fitted with two 230 h.p. BMW IV engines. Two machines have been entered by the Junkers Works, one, the W.33, being fitted with a 280/310 h.p. Junkers L.5 engine, and the other type W.34, with a Bristol "Jupiter."

The Heinkel Works have entered no less than four machines, two H.E. 5's, of which one has a Napier "Lion," and the other a Gnome-Rhone "Jupiter." The other two are of the H.D.24 type, and both are fitted with 230-h.p. BMW IV engines.

The last entry, with the "unlucky" number 13, is known as the type W.3, and has been entered by Ernst Gerbrecht, Werden-Ruhr, a firm of which we do not remember having previously heard. This machine is stated to be fitted with three Thulin rotary engines of 110 h.p. each.

The competition is being held in order to encourage the production of seaworthy, reliable and economic seaplanes suitable for carrying mails. The rules are rather complicated and difficult for outsiders to follow, although doubtless they are very "scientific," as is usually the case with German competitors.

### Cobham's Flight to Australia

MR. COBHAM, whose flight to Australia was so tragically interrupted by the shooting of Mr. A. B. Elliott, has been able to resume his journey, having obtained the services of a R.A.F. mechanic, Sergt. Ward, at Basra. At first one of the Armstrong-Siddeley engineers, Mr. W. Moore, was being sent out to take Mr. Elliott's place, but as this meant a fortnight's

delay, it was decided to take Sergt. Ward. They left Basra on the D.H.50j seaplane on July 13, and made a good trip to Bushire.

It is now reported that several arrests have been made in connection with the shooting of Mr. Elliott. Mr. Elliott was buried at the British cemetery at Basra with full military honours on July 7.



# THE ROYAL AIR FORCE

London Gazette, July 6, 1926.

## General Duties Branch

Flight Lieut. J. L. Kirby is granted a permanent commission in this rank (June 1). The follg. Pilot Officers are promoted to rank of Flying Officer, with effect from and with seniority of March 26 :—C. F. C. Coaker, R. F. Findlay.

The follg. Flying Officers are transferred to Reserve. Class A :—C. B. Dove (July 2); S. H. Cooper, W. F. Davenport, R. T. Shepherd (July 4); I. M. Morris, C. E. Stuart (July 5). Flying Officer E. A. Scales is transferred to Reserve, Class C (July 7); Flying Officer J. J. Brownridge is placed on the retired list (June 30); Flying Officer (Hon. Flight Lieut.) R. Kennedy resigns his short-service commn. (July 7); the short-service commn. of Pilot Officer on probation V. W. Huggett is terminated on cessation of duty (July 7).

## Accountant Branch

Flying Officer R. C. Dickinson is cashiered by sentence of General Court Martial (June 16).

## AUXILIARY AIR FORCE

### General Duties Branch

The follg. to be Flying Officer :—No. 600 (City of London) (Bombing) Sqdn.—C. G. Jenyns (July 6).

The follg. to be Flight Lieut. :—No. 601 (Co. of London) (Bombing) Sqdn.—S. B. Collett (July 6).

The follg. to be Pilot Officer :—No. 602 (City of Glasgow) (Bombing) Sqdn.—C. A. S. Parker (July 6).

The follg. to be Squadron Leader :—No. 605 (Co. of Warwick) (Bombing) Sqdn.—J. A. C. Wright to commd. the Sqdn. (July 6).

## ROYAL AIR FORCE INTELLIGENCE

**Appointments.**—The following appointments in the Royal Air Force are notified :—

### Medical Branch.

**Flight Lieutenant :** A. Dickson, M.B., to Aircraft Depot, India, 27.6.26.

**Flight Lieutenants :** (Hon. Sqdn. Leader) C. A. Meaden, to No. 29 Sqdn., Duxford, 23.6.26. R. L. C. Fisher, M.B., to No. 32 Sqdn., Kenley, 23.6.26.

**Flying Officer (Dental) :** F. F. Anslow, to No. 4 Sqdn., S. Farnborough, 21.6.26.

**Flying Officers :** E. J. Jenkins, to Station H.Q., Bircham Newton, 23.6.26. M. J. Marren, to No. 3 Sqdn., Upavon, 24.6.26. S. F. Heatley, M.B., B.A., to Sch. of Tech. Training (Men), Manston, 28.6.26. P. H. Perkins, to R.A.F. Depot, Uxbridge, 28.6.26.

## IN PARLIAMENT

### Royal Air Force Attaches

SIR F. WISE, on July 5, asked the Secretary of State for Air how many Air Attaches there are; and what is the cost?

SIR S. HOARE : The number of Air Attaches is four, and their emoluments, inclusive of the special allowances appropriate to the foreign capitals to which they are accredited, amount to £9,630 per annum.

### Light Aeroplane Club Grants

MR. T. WILLIAMS, on July 7, asked the Secretary of State for Air what financial or other assistance is afforded by his Department to private flying clubs where new pilots are being trained; and what inducements are held out to young pilots when they receive a certificate of proficiency?

SIR S. HOARE : Agreements for a term of two years have been made with six light aeroplane clubs, whose constitution has been approved by the

Air Ministry, providing for the grant to each of a sum not exceeding £2,000 for the purchase of initial equipment, a grant not exceeding £1,000 for each year of the agreement towards maintenance of the equipment, and a replacement grant, if required, during the first year of half the cost of replacement within a maximum of £1,000. As regards the second part of the question, a grant of £10, of which half may be given to the club member, is made to the club for each member who, having been trained on club aircraft, obtains a pilot's certificate.

### Royal Air Force Pageant Petrol

COL. DAY, on July 9, asked the Secretary of State for Air the number of gallons of petrol used by aeroplanes for the Air Force Display on Saturday, July 3, at Hendon?

SIR SAMUEL HOARE : The answer is approximately 13,500 galls.

## HONOURS INVESTITURE

AMONGST those present at the Investiture held by His Majesty the King at Buckingham Palace on July 12 were Air-Marshal Sir John Salmond (Principal Air Aide-de-Camp) and Group Captain P. F. M. Fellowes, R.A.F. (Aide-de-Camp in Waiting). The following were introduced into the presence of the Sovereign, when the King invested them with the Insignia of the respective Divisions of the Orders into which they have been admitted :—

### Order of the British Empire

#### (Military Division)

Received the honour of Knighthood : Knight Commander : Air Vice-Marshal John Steel.

#### Commander

Wing Commander Frank Kirby, V.C., R.A.F.

#### Officers

Flight Lieutenant Hedley Drew, R.A.F.

Flight Lieutenant Albert Wombwell, R.A.F.

### Members

Flight Lieutenant John Amers, R.A.F.

Flying Officer William Jinman, R.A.F.

### Distinguished Service Order

#### Companion

Squadron-Leader James Robb, R.A.F.

### Distinguished Flying Cross

Flight Lieutenant Francis Luxmoore, R.A.F.

Flying Officer Harry Reid, R.A.F.

### Air Force Cross

Squadron Leader Arthur Coningham, R.A.F.

Flight Lieutenant John Chick, R.A.F.

Flight Lieutenant Archibald Rankin, R.A.F.

## KING'S CUP RACE: A REPORT FROM CHELTENHAM

SELDOM has Brockworth Aerodrome, the air port of Cheltenham, and one of the turning-points in the race, presented a more cheerful aspect than on Saturday, the second day of the race. Normally, but for the perpetual activity of Gloster machines and their attendants, a more delightfully secluded spot it would be difficult to find, very appropriate surroundings for the experimental work of the Gloucestershire Aircraft Co.; but on this occasion the company utilised the opportunity of the King's Cup Race to stimulate interest in aviation in general, and, incidentally, to assist the Cheltenham General Hospital, to which the proceeds of the day were devoted.

The aerodrome was attractively decorated with flags and a special enclosure was made for guests, where lunch and tea were provided. A large number of distinguished local residents from the district were invited, and the general public was admitted for 1s. The large number present indicated that interest in aviation in this area is by no means lacking. Mr. D. Longden, the managing director, received the guests as they arrived. The progress of the race was marked up on large boards in view of everybody, while loud-speakers informed the company of the progress of events.

An excellent programme was arranged between the intervals of the arrival of the King's Cup competitors. Mr. Maurice Piercey, primed by a highly enthusiastic public, thrilled every one with brilliant demonstrations of the "Gamecock," the "Grebe," and other Gloster machines.

The Bristol Aeroplane Co. very generously loaned the services of Mr. C. R. L. Shaw and a Lucifer two-seater for passenger flights, which proved more popular than Mr. Shaw could cope with, and bookings had to be suspended. Many local celebrities were seen to take their aerial christening, including the Mayor of Gloucester and the Town Clerk of Cheltenham.

A model aeroplane competition for boys under 16, for which a prize had been offered, was judged during the afternoon, the prize being awarded to Neville Sandford, aged 10. Dancing followed in No. 2 Hangar during the evening, to the music of the company's string orchestra.

The occasion was honoured by the presence of Maj. Wuori, chief of the Finnish Air Force, accompanied by Sqdn.-Ldr. Field, who were highly interested in the race and left soon after lunch in order to be at Hendon for the finish. [No pun intended, we hope?—ED.]

## MR. C. M. KEYS IN LONDON

LAST week Mr. C. R. Fairey very happily arranged a delightful function at the Savoy Hotel to enable a number of prominent members of the aeronautical world to meet Mr. C. M. Keys, Chairman of the National Air Transport of the U.S.A. and chief of the Curtiss Company of New York, who, with his wife, is at present on a visit to this country.

The host and chairman at the luncheon, Mr. Fairey, after congratulating Sir Frank McClean on his knighthood upon this, the first public occasion since it was announced, said that all interested in aviation, he was sure, would be glad to have the opportunity of welcoming Mr. Keys to this country, who, amongst other things, would be remembered here as having brought the world to appreciate that the Schneider Cup was an international event, and not merely a British *versus* United States contest. Mr. Fairey, continuing, said that five years or more ago American aviation had got down to a low position, technically speaking, from which it had since emerged and, once Mr. Keys obtained control of the Curtiss Company, he had gone ahead and secured record trophies. Until Mr. Keys "arrived," aviation in the United States had lacked the business man, who could look forward and carry through details to a successful conclusion against the time when the golden future arrived, which, he was certain, was assured to aviation. Speed, he said, was the one crucial test of all improvements and advance. Racing was therefore one of the greatest and cheapest forms of obtaining technical data that we possessed and, therefore, also the cheapest road leading to economy of operation for civil aviation. It was possible, he said, that the next Schneider Cup contest would be the last. In 1924 the walk-over sportingly forgone by the United States gave British and other firms time to prepare for 1925. They greatly welcomed that, and he would give a hint to Mr. Keys that, if this year a similar concession could be granted, the action would be fully appreciated this side of the world. In regard to the attempt recently made to alter the Schneider Cup rules from pure speed to weight-carrying, he was glad to think this was, through Col. O'Gorman's oratory, defeated. A racing 'plane handicapped with 300 lbs. or so load was of no use whatever to aviation. Let it be pure racing and finish at that. The racing craft could never become a commercial machine. The only rule, in his estimation, which could be usefully introduced into the Schneider Cup rules was that of limiting landing speed. It not only provided for the safety of the pilot, but ensured that genuine advance in aeronautics which was so much desired, besides other advantages. He repeated that racing was the cheapest form of technical research, and he was afraid there was a long hill to be climbed technically before aviation became such a real commercial proposition that the industry need not look only to the Government for orders for military machines to maintain their works at full blast.

Air Vice-Marshal Sir Sefton Branner, in seconding the toast, said the United States had done two and a half times the amount of transport flying than our country, and of that a large proportion was done at night time. He looked to America for many lessons and expected the United States to make such progress in the next five years as to wake up our side to do something really great to catch them up. We never moved except under a crisis. At the same time he was satisfied we could produce here a nearer example of a commercially designed aeroplane than the United States, mainly due to British private enterprise. Throughout German and Continental circles he found that aviation was regarded as a real solid future proposition, and that British engines were considered far ahead of their own or any aviation engines in the world. Throughout all concerned had their hearts in their jobs without any worry about international politics or complications.

Mr. Keys, in replying, expressed his thanks for the extreme kindness offered to himself and wife on all sides since his visit to this country on their holiday. He was perhaps over credited in having all the success of the Curtiss Company placed upon his shoulders. He had only helped to that end with the help of others. Regarding the Schneider Cup, he considered that by seeking speed, pure and simple, all other useful factors were brought out and refined for commercial purposes.

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### 1926 Light 'Plane Trials—and Dope

IN reference to the forthcoming light 'plane trials at Lympne, Titanine-Emallite, Ltd., ask us to state that they are prepared to assist in any way in their power all intending competitors regarding the important question of suitable doping schemes, &c., for competing machines.

## NEW HON. SEC. TO I.Ae.E.

THE Institution of Aeronautical Engineers greatly regrets to have lost the valuable services of Mr. R. L. Howard-Flanders, A.F.R.Ae.S., A.M.I.Mech.E., M.I.Ae.E. (Hons.), as Honorary Secretary, he having found it necessary, through pressure of other duties, to resign that office, though he still remains a Member of the Council. Mr. Howard-Flanders has carried on the Honorary Secretaryship since the end of 1921, when he took it over from the Founding Secretary, Mr. W. B. Douglas Shaw, and as a result of Mr. Flanders's devotion and energy the institution is today in a flourishing position.

The institution is fortunate in having, as successor to Mr. Howard-Flanders, Mr. W. Villa Gilbert, M.I.Ae.E., a Member of the Council, and who has very kindly offered to carry on the Honorary Secretaryship and has been duly appointed as from July 1, 1926.

Mr. Gilbert has had a long and varied experience in aeronautics, and is one of the Founder Members of the Royal Aeronautical Society. He is devoting his energies to the continued success of the Institution of Aeronautical Engineers as a body concerned with the practical side of aeronautics, and is particularly desirous of giving individual attention to the requirements and interests of the members. At the present time the fixture list for the Winter Session is in preparation, and full details will be announced in the early autumn.

Mr. Gilbert will be very pleased at any time to answer inquiries regarding the institution and its works, either verbally or in writing. Inquiries should be addressed to the Honorary Secretary, Institution of Aeronautical Engineers, 34, Broadway, Westminster, London, S.W.1. Telephone: Victoria, 5333.

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### PUBLICATIONS RECEIVED

*Morris Electric Crane.* Herbert Morris, Ltd., Loughborough.  
*Prevention of Bribery.* No. 127. June, 1926. Bribery and Secret Commissions Prevention League, Inc., 22, Buckingham Gate, London, S.W.1.

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### NEW COMPANY REGISTERED

HAMPSHIRE AEROPLANE CLUB, LTD., St. Michael's Chambers, 126, High Street, Southampton.—Capital £100, in £1 shares. Objects:—To promote, assist and encourage aerial navigation in all its forms, and the study of aeronautics, also the development of all sciences connected therewith and the construction of aerial conveyances of all kinds, etc. Directors: R. H. Bound, A. N. Clifton, R. V. Perfect, O. E. Simmonds, A. R. Van den Bergh. Secretary, J. R. Hillair-Brady.

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### AERONAUTICAL PATENT SPECIFICATIONS

Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motor. The numbers in brackets are those under which the Specifications will be printed and abridged, etc.

#### APPLIED FOR IN 1925

Published July 15, 1926

- 8,510. M. L. BRAMSON. Control of aeroplanes, etc. (253,642.)
- 9,199. LUFTSCHIFFBAU ZEPPELIN GES. and B. SCHNITZER. Means for anchoring airships. (231,906.)
- 9,495. BOULTON AND PAUL, LTD., and J. D. NORTH. Girder structures particularly applicable to aircraft. (253,651.)
- 25,255. SPERRY GYROSCOPE CO., LTD., and W. G. HARDING. Direction-finding apparatus. (253,771.)
- 32,351. CURTISS AEROPLANE AND MOTOR CO., INC. Lubrication system for motors. (253,814.)

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